

# **Supplementary Document 10**

## **Shift-Share Analysis: South Carolina, 2005 - 2018**

**Prepared for the Appalachian Regional Commission by the  
West Virginia University Regional Research Institute**

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## Chapter 1. Anderson County, South Carolina

Employment in Anderson County, South Carolina, grew from 59,912 in 2005 to 65,744 in 2018, for a change of 5,832, or 9.73%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

### Summary Results for Anderson County, South Carolina

| County<br>Summary | NS    | TS     | IM     | RS     |
|-------------------|-------|--------|--------|--------|
| vs. U.S.          | 6,760 | -927   | -2,853 | 1,926  |
| vs.<br>Appalachia | 204   | 5,628  | 43     | 5,585  |
| vs. Neighbors     | 7,912 | -2,088 | 591    | -2,679 |

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Anderson County, South Carolina, in comparison to at least one of the three referent regions.

## Chapter 1. Anderson County, South Carolina

### Industry Group Membership for Anderson County, South Carolina

| Industry | Name                           | Group Membership | Type A or B or C | Type I or II or III | Type a or b or c | Type i or ii or iii |
|----------|--------------------------------|------------------|------------------|---------------------|------------------|---------------------|
| 13       | Machinery                      | F III c iii      | no               | yes                 | yes              | yes                 |
| 16       | Motor vehicles, bodies ...     | C IV b v         | yes              | no                  | yes              | no                  |
| 23       | Paper products                 | D III c i        | no               | yes                 | yes              | yes                 |
| 27       | Plastics and rubber prod...    | D III a iii      | no               | yes                 | yes              | yes                 |
| 28       | Wholesale trade                | F III c i        | no               | yes                 | yes              | yes                 |
| 31       | General merchandise ...        | F III c i        | no               | yes                 | yes              | yes                 |
| 40       | Warehousing and storage        | E I a i          | no               | yes                 | yes              | yes                 |
| 53       | Miscellaneous profession ...   | B I a i          | yes              | yes                 | yes              | yes                 |
| 57       | Educational services           | F III a iii      | no               | yes                 | yes              | yes                 |
| 58       | Ambulatory health care ...     | B II b ii        | yes              | yes                 | yes              | yes                 |
| 60       | Nursing and residential ...    | E II a ii        | no               | yes                 | yes              | yes                 |
| 61       | Social assistance              | B I a i          | yes              | yes                 | yes              | yes                 |
| 65       | Food services and drinking ... | B II b v         | yes              | yes                 | yes              | no                  |
| 66       | Other services, exc. gov ...   | F III c iii      | no               | yes                 | yes              | yes                 |

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Anderson County, South Carolina vs. the United States

Groups a, b, and c are from Anderson County, South Carolina vs. Appalachia

Groups i, ii, and iii are from Anderson County, South Carolina vs. its neighbors

### Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Anderson County, South Carolina, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Anderson County, South Carolina, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Anderson County, South Carolina, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Anderson County, South Carolina, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

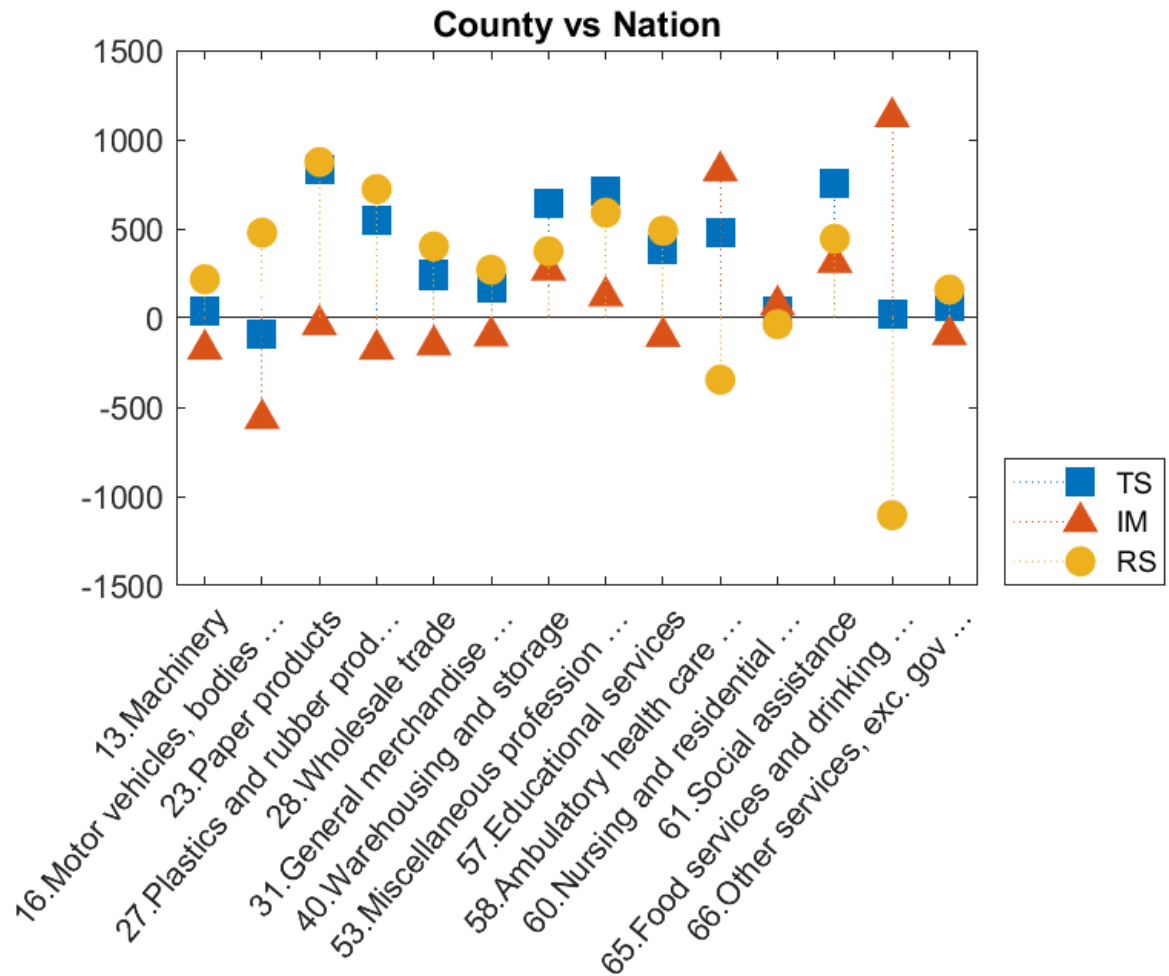
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Anderson County, South Carolina, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

### Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Anderson County, South Carolina vs the U.S.

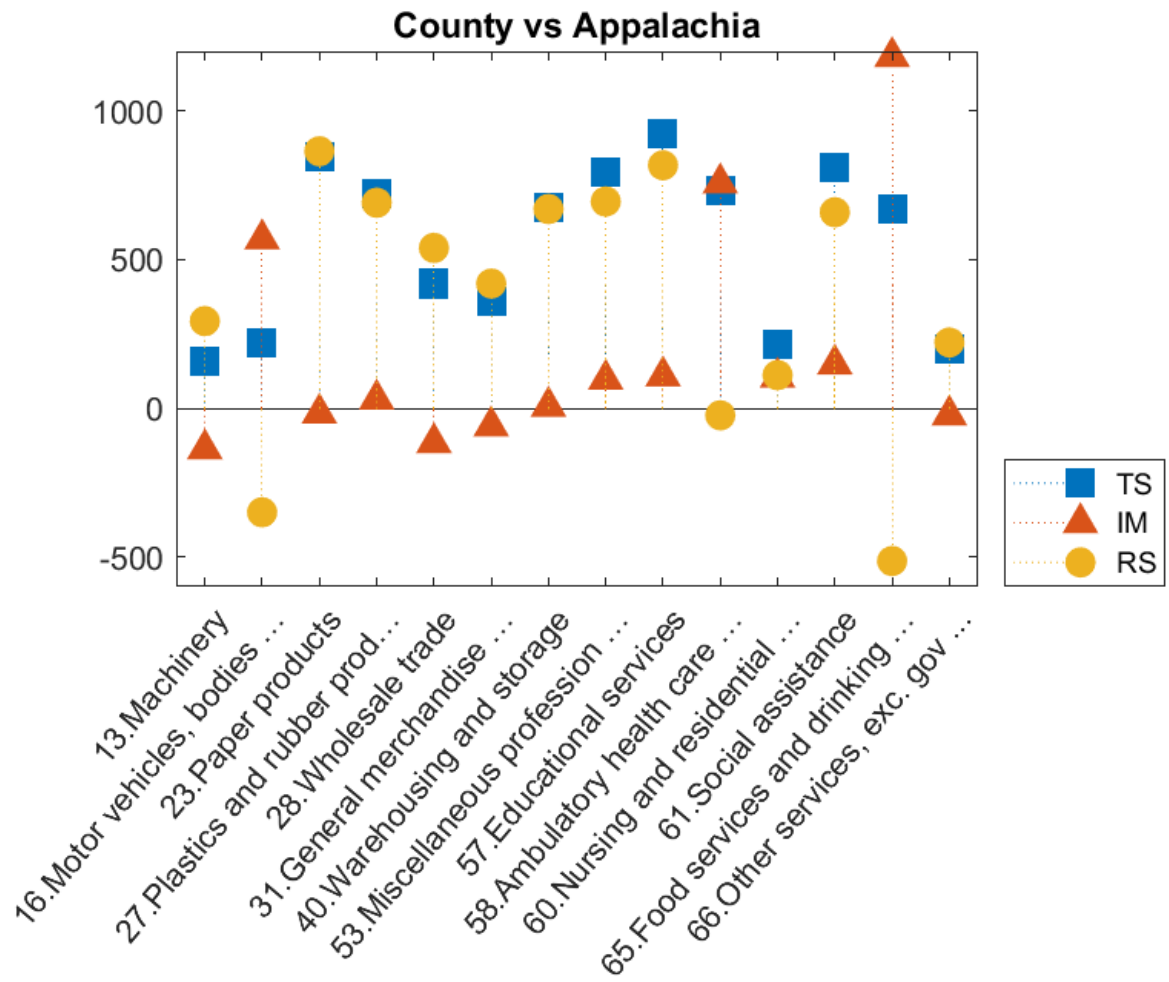


## Chapter 1. Anderson County, South Carolina

### Anderson County, South Carolina vs U.S. for Selected Industries

| Industry | Name                                 | NS  | TS  | IM    | RS     | Employment<br>2018 |
|----------|--------------------------------------|-----|-----|-------|--------|--------------------|
| 13       | Machinery                            | 119 | 42  | -175  | 217    | 1,211              |
| 16       | Motor<br>vehicles,<br>bodies ...     | 316 | -87 | -565  | 478    | 3,027              |
| 23       | Paper<br>products                    | 12  | 835 | -39   | 874    | 955                |
| 27       | Plastics and<br>rubber prod...       | 180 | 547 | -175  | 722    | 2,321              |
| 28       | Wholesale<br>trade                   | 180 | 249 | -152  | 401    | 2,021              |
| 31       | General<br>merchandise<br>...        | 196 | 169 | -101  | 270    | 2,102              |
| 40       | Warehousing<br>and storage           | 36  | 641 | 267   | 374    | 996                |
| 53       | Miscellaneous<br>profession ...      | 82  | 713 | 123   | 590    | 1,521              |
| 57       | Educational<br>services              | 557 | 385 | -104  | 489    | 5,881              |
| 58       | Ambulatory<br>health care ...        | 265 | 477 | 823   | -346   | 3,087              |
| 60       | Nursing and<br>residential ...       | 183 | 37  | 72    | -35    | 1,843              |
| 61       | Social<br>assistance                 | 54  | 755 | 311   | 444    | 1,284              |
| 65       | Food services<br>and drinking<br>... | 666 | 22  | 1,127 | -1,105 | 6,598              |
| 66       | Other<br>services, exc.<br>gov ...   | 138 | 64  | -95   | 159    | 1,430              |

Selected SSA Components for Anderson County, South Carolina vs the Appalachian Region



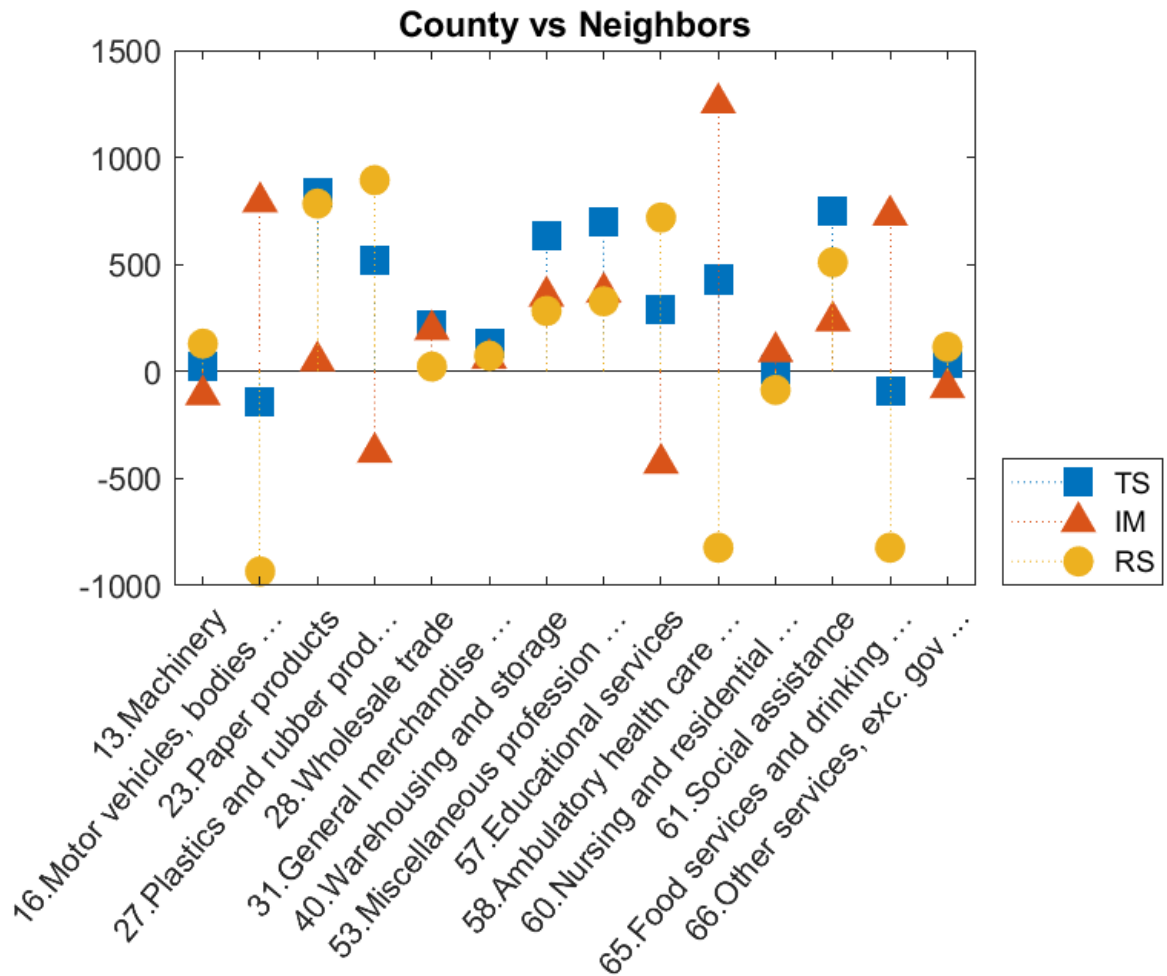


## Chapter 1. Anderson County, South Carolina

### Selected SSA Components for Anderson County, South Carolina vs the Appalachian Region

| Industry | Name                                 | NS | TS  | IM    | RS   | Employment<br>2018 |
|----------|--------------------------------------|----|-----|-------|------|--------------------|
| 13       | Machinery                            | 4  | 156 | -137  | 293  | 1,211              |
| 16       | Motor<br>vehicles,<br>bodies ...     | 10 | 219 | 569   | -350 | 3,027              |
| 23       | Paper<br>products                    | 0  | 847 | -17   | 864  | 955                |
| 27       | Plastics and<br>rubber prod...       | 5  | 721 | 30    | 691  | 2,321              |
| 28       | Wholesale<br>trade                   | 5  | 423 | -116  | 539  | 2,021              |
| 31       | General<br>merchandise<br>...        | 6  | 359 | -60   | 419  | 2,102              |
| 40       | Warehousing<br>and storage           | 1  | 676 | 6     | 670  | 996                |
| 53       | Miscellaneous<br>profession ...      | 2  | 792 | 97    | 695  | 1,521              |
| 57       | Educational<br>services              | 17 | 925 | 108   | 817  | 5,881              |
| 58       | Ambulatory<br>health care ...        | 8  | 733 | 757   | -24  | 3,087              |
| 60       | Nursing and<br>residential ...       | 6  | 215 | 104   | 111  | 1,843              |
| 61       | Social<br>assistance                 | 2  | 807 | 148   | 659  | 1,284              |
| 65       | Food services<br>and drinking<br>... | 20 | 668 | 1,182 | -514 | 6,598              |
| 66       | Other<br>services, exc.<br>gov ...   | 4  | 198 | -23   | 221  | 1,430              |

Selected SSA Components for Anderson County, South Carolina vs Neighbors



## Chapter 1. Anderson County, South Carolina

### Selected SSA Components for Anderson County, South Carolina vs Neighbors for Selected Industries

| Industry | Name                                 | NS  | TS   | IM    | RS   | Employment<br>2018 |
|----------|--------------------------------------|-----|------|-------|------|--------------------|
| 13       | Machinery                            | 139 | 21   | -109  | 130  | 1,211              |
| 16       | Motor<br>vehicles,<br>bodies ...     | 370 | -142 | 792   | -934 | 3,027              |
| 23       | Paper<br>products                    | 14  | 833  | 49    | 784  | 955                |
| 27       | Plastics and<br>rubber prod...       | 211 | 516  | -378  | 894  | 2,321              |
| 28       | Wholesale<br>trade                   | 210 | 218  | 195   | 23   | 2,021              |
| 31       | General<br>merchandise<br>...        | 229 | 135  | 61    | 74   | 2,102              |
| 40       | Warehousing<br>and storage           | 42  | 635  | 352   | 283  | 996                |
| 53       | Miscellaneous<br>profession ...      | 96  | 698  | 370   | 328  | 1,521              |
| 57       | Educational<br>services              | 652 | 290  | -429  | 719  | 5,881              |
| 58       | Ambulatory<br>health care ...        | 310 | 431  | 1,254 | -823 | 3,087              |
| 60       | Nursing and<br>residential ...       | 214 | 6    | 92    | -86  | 1,843              |
| 61       | Social<br>assistance                 | 63  | 746  | 236   | 510  | 1,284              |
| 65       | Food services<br>and drinking<br>... | 781 | -93  | 730   | -823 | 6,598              |
| 66       | Other<br>services, exc.<br>gov ...   | 162 | 39   | -76   | 115  | 1,430              |

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## Chapter 2. Cherokee County, South Carolina

Employment in Cherokee County, South Carolina, grew from 20,263 in 2005 to 21,297 in 2018, for a change of 1,034, or 5.1%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

### Summary Results for Cherokee County, South Carolina

| County<br>Summary | NS    | TS     | IM   | RS     |
|-------------------|-------|--------|------|--------|
| vs. U.S.          | 2,287 | -1,252 | -986 | -266   |
| vs.<br>Appalachia | 66    | 966    | -786 | 1,752  |
| vs. Neighbors     | 3,928 | -2,897 | -544 | -2,353 |

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Cherokee County, South Carolina, in comparison to at least one of the three referent regions.

## Chapter 2. Cherokee County, South Carolina

### Industry Group Membership for Cherokee County, South Carolina

| Industry | Name                           | Group Membership | Type A or B or C | Type I or II or III | Type a or b or c | Type i or ii or iii |
|----------|--------------------------------|------------------|------------------|---------------------|------------------|---------------------|
| 16       | Motor vehicles, bodies ...     | C III a ii       | yes              | yes                 | yes              | yes                 |
| 28       | Wholesale trade                | F III c iii      | no               | yes                 | yes              | yes                 |
| 32       | Other retail                   | F III c i        | no               | yes                 | yes              | yes                 |
| 40       | Warehousing and storage        | E II a ii        | no               | yes                 | yes              | yes                 |
| 55       | Administrative and ...         | A I a i          | yes              | yes                 | yes              | yes                 |
| 57       | Educational services           | F III a v        | no               | yes                 | yes              | no                  |
| 65       | Food services and drinking ... | B V b v          | yes              | no                  | yes              | no                  |
| 66       | Other services, exc. gov ...   | F III c i        | no               | yes                 | yes              | yes                 |

#### Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Cherokee County, South Carolina vs. the United States

Groups a, b, and c are from Cherokee County, South Carolina vs. Appalachia

Groups i, ii, and iii are from Cherokee County, South Carolina vs. its neighbors

### Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Cherokee County, South Carolina, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Cherokee County, South Carolina, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Cherokee County, South Carolina, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Cherokee County, South Carolina, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

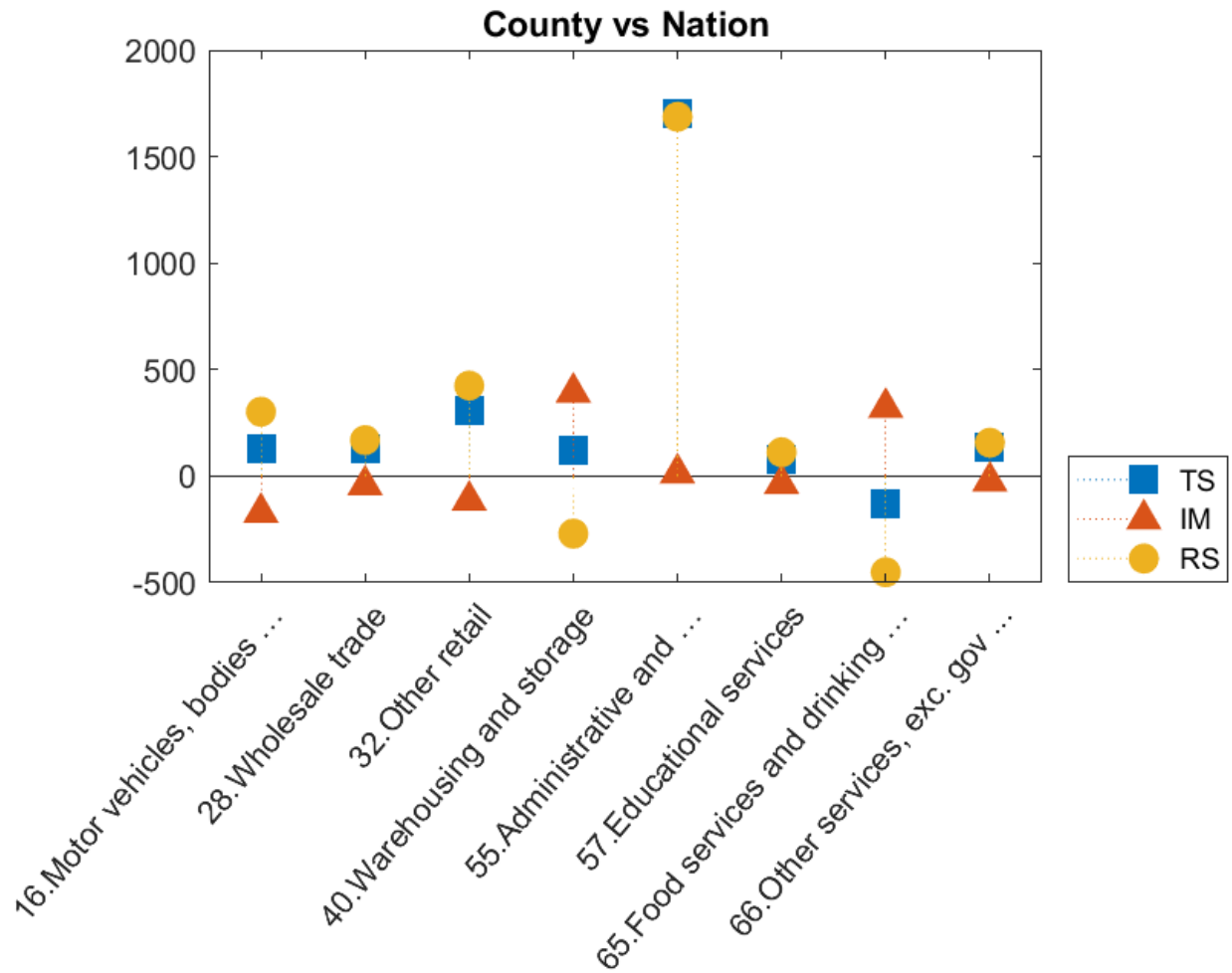
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Cherokee County, South Carolina, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

### Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Cherokee County, South Carolina vs the U.S.



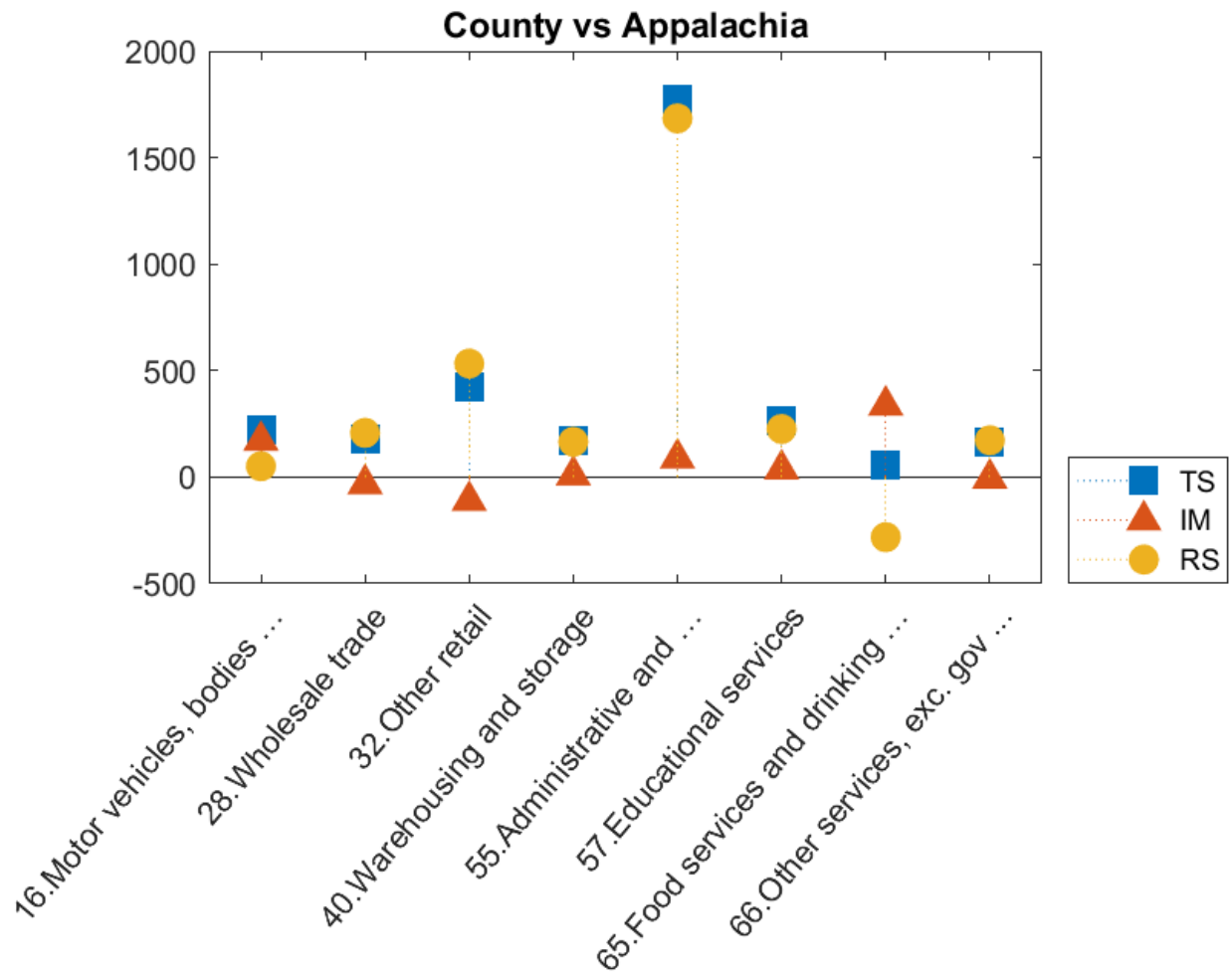
## Chapter 2. Cherokee County, South Carolina

### Cherokee County, South Carolina vs U.S. for Selected Industries

| Industry | Name                           | NS  | TS    | IM   | RS    | Employment<br>2018 |
|----------|--------------------------------|-----|-------|------|-------|--------------------|
| 16       | Motor vehicles, bodies ...     | 96  | 131   | -171 | 302   | 1,074              |
| 28       | Wholesale trade                | 50  | 127   | -42  | 169   | 619                |
| 32       | Other retail                   | 114 | 311   | -114 | 425   | 1,438              |
| 40       | Warehousing and storage        | 53  | 123   | 393  | -270  | 646                |
| 55       | Administrative and ...         | 74  | 1,701 | 14   | 1,687 | 2,430              |
| 57       | Educational services           | 193 | 76    | -36  | 112   | 1,978              |
| 65       | Food services and drinking ... | 190 | -129  | 322  | -451  | 1,748              |
| 66       | Other services, exc. gov ...   | 34  | 133   | -24  | 157   | 472                |



Selected SSA Components for Cherokee County, South Carolina vs the Appalachian Region

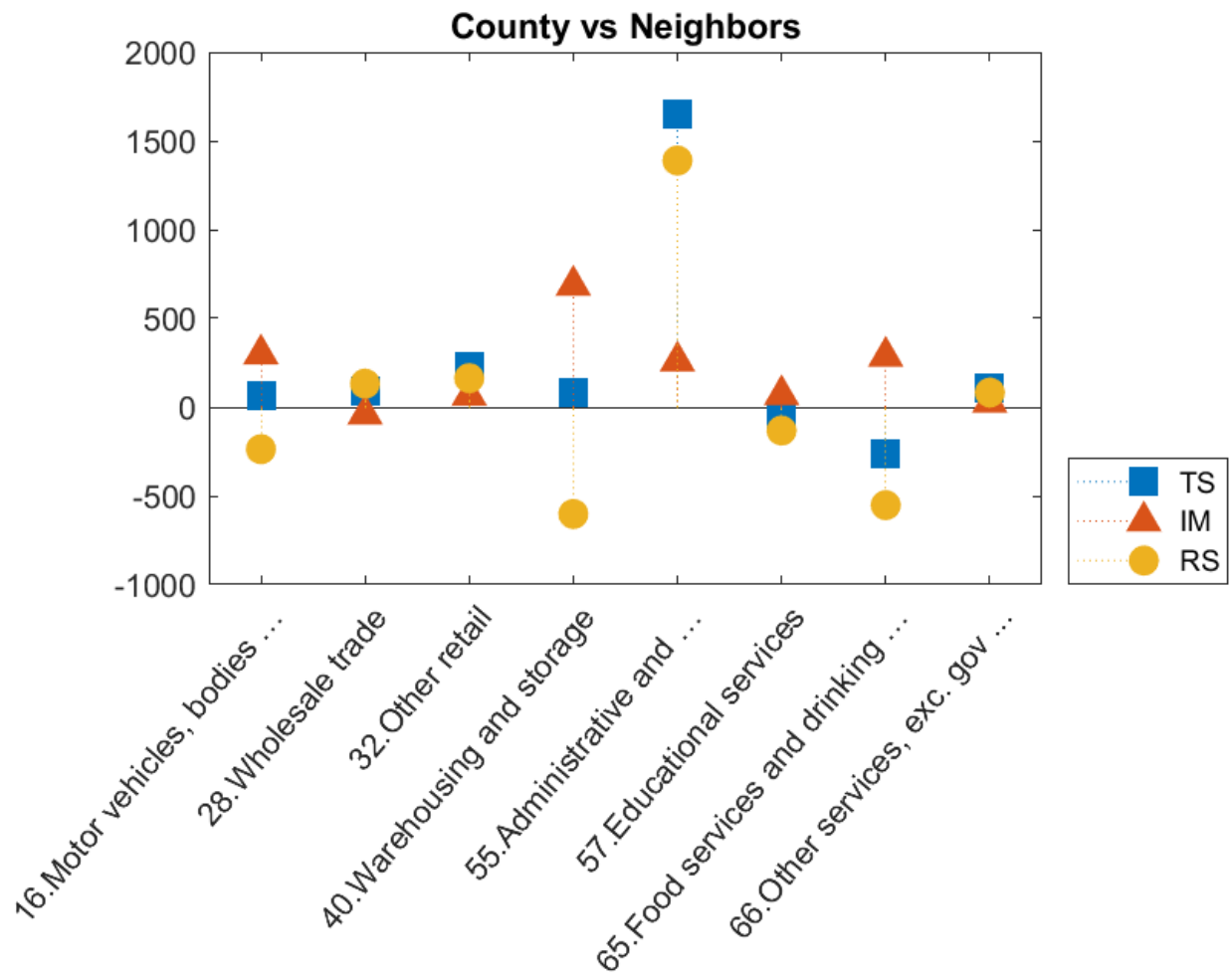


## Chapter 2. Cherokee County, South Carolina

### Selected SSA Components for Cherokee County, South Carolina vs the Appalachian Region

| Industry | Name                           | NS | TS    | IM   | RS    | Employment<br>2018 |
|----------|--------------------------------|----|-------|------|-------|--------------------|
| 16       | Motor vehicles, bodies ...     | 3  | 223   | 172  | 51    | 1,074              |
| 28       | Wholesale trade                | 2  | 176   | -32  | 208   | 619                |
| 32       | Other retail                   | 3  | 423   | -110 | 533   | 1,438              |
| 40       | Warehousing and storage        | 2  | 175   | 9    | 166   | 646                |
| 55       | Administrative and ...         | 2  | 1,773 | 89   | 1,684 | 2,430              |
| 57       | Educational services           | 6  | 263   | 37   | 226   | 1,978              |
| 65       | Food services and drinking ... | 6  | 55    | 337  | -282  | 1,748              |
| 66       | Other services, exc. gov ...   | 1  | 167   | -6   | 173   | 472                |

Selected SSA Components for Cherokee County, South Carolina vs Neighbors



## Chapter 2. Cherokee County, South Carolina

### Selected SSA Components for Cherokee County, South Carolina vs Neighbors for Selected Industries

| Industry | Name                                 | NS  | TS    | IM  | RS    | Employment<br>2018 |
|----------|--------------------------------------|-----|-------|-----|-------|--------------------|
| 16       | Motor<br>vehicles,<br>bodies ...     | 164 | 62    | 299 | -237  | 1,074              |
| 28       | Wholesale<br>trade                   | 86  | 92    | -40 | 132   | 619                |
| 32       | Other retail                         | 196 | 229   | 66  | 163   | 1,438              |
| 40       | Warehousing<br>and storage           | 91  | 84    | 686 | -602  | 646                |
| 55       | Administrative<br>and ...            | 127 | 1,648 | 259 | 1,389 | 2,430              |
| 57       | Educational<br>services              | 332 | -63   | 69  | -132  | 1,978              |
| 65       | Food services<br>and drinking<br>... | 327 | -266  | 286 | -552  | 1,748              |
| 66       | Other<br>services, exc.<br>gov ...   | 59  | 109   | 27  | 82    | 472                |

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## Chapter 3. Greenville County, South Carolina

Employment in Greenville County, South Carolina, grew from 230,682 in 2005 to 275,020 in 2018, for a change of 44,338, or 19.22%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

### Summary Results for Greenville County, South Carolina

| <b>County<br/>Summary</b> | <b>NS</b> | <b>TS</b> | <b>IM</b> | <b>RS</b> |
|---------------------------|-----------|-----------|-----------|-----------|
| vs. U.S.                  | 26,012    | 18,321    | -5,432    | 23,753    |
| vs.<br>Appalachia         | 783       | 43,554    | 117       | 43,437    |
| vs. Neighbors             | 35,842    | 8,501     | 31        | 8,470     |

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III – and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Greenville County, South Carolina, in comparison to at least one of the three referent regions.

### Chapter 3. Greenville County, South Carolina

#### Industry Group Membership for Greenville County, South Carolina

| Industry | Name                           | Group Membership | Type A or B or C | Type I or II or III | Type a or b or c | Type i or ii or iii |
|----------|--------------------------------|------------------|------------------|---------------------|------------------|---------------------|
| 12       | Fabricated metal products      | F III c iii      | no               | yes                 | yes              | yes                 |
| 28       | Wholesale trade                | F III c i        | no               | yes                 | yes              | yes                 |
| 29       | Motor vehicle and parts ...    | F III a iv       | no               | yes                 | yes              | no                  |
| 31       | General merchandise ...        | F III c v        | no               | yes                 | yes              | no                  |
| 43       | Broadcasting and telecom ...   | F III c iv       | no               | yes                 | yes              | no                  |
| 45       | Federal Reserve banks, ...     | F III c i        | no               | yes                 | yes              | yes                 |
| 49       | Real estate                    | F III a iii      | no               | yes                 | yes              | yes                 |
| 53       | Miscellaneous profession ...   | B I a i          | yes              | yes                 | yes              | yes                 |
| 54       | Management of companies ...    | A I a i          | yes              | yes                 | yes              | yes                 |
| 55       | Administrative and ...         | A I a i          | yes              | yes                 | yes              | yes                 |
| 58       | Ambulatory health care ...     | B I a i          | yes              | yes                 | yes              | yes                 |
| 59       | Hospitals                      | E I a i          | no               | yes                 | yes              | yes                 |
| 60       | Nursing and residential ...    | E I a i          | no               | yes                 | yes              | yes                 |
| 61       | Social assistance              | B I a i          | yes              | yes                 | yes              | yes                 |
| 63       | Amusements, gambling, ...      | B I a i          | yes              | yes                 | yes              | yes                 |
| 65       | Food services and drinking ... | B I a i          | yes              | yes                 | yes              | yes                 |
| 68       | Government                     | F III a iii      | no               | yes                 | yes              | yes                 |

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Greenville County, South Carolina vs. the United States

Groups a, b, and c are from Greenville County, South Carolina vs. Appalachia

### **Chapter 3. Greenville County, South Carolina**

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Groups i, ii, and iii are from Greenville County, South Carolina vs. its neighbors

### Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Greenville County, South Carolina, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Greenville County, South Carolina, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Greenville County, South Carolina, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Greenville County, South Carolina, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Greenville County, South Carolina, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

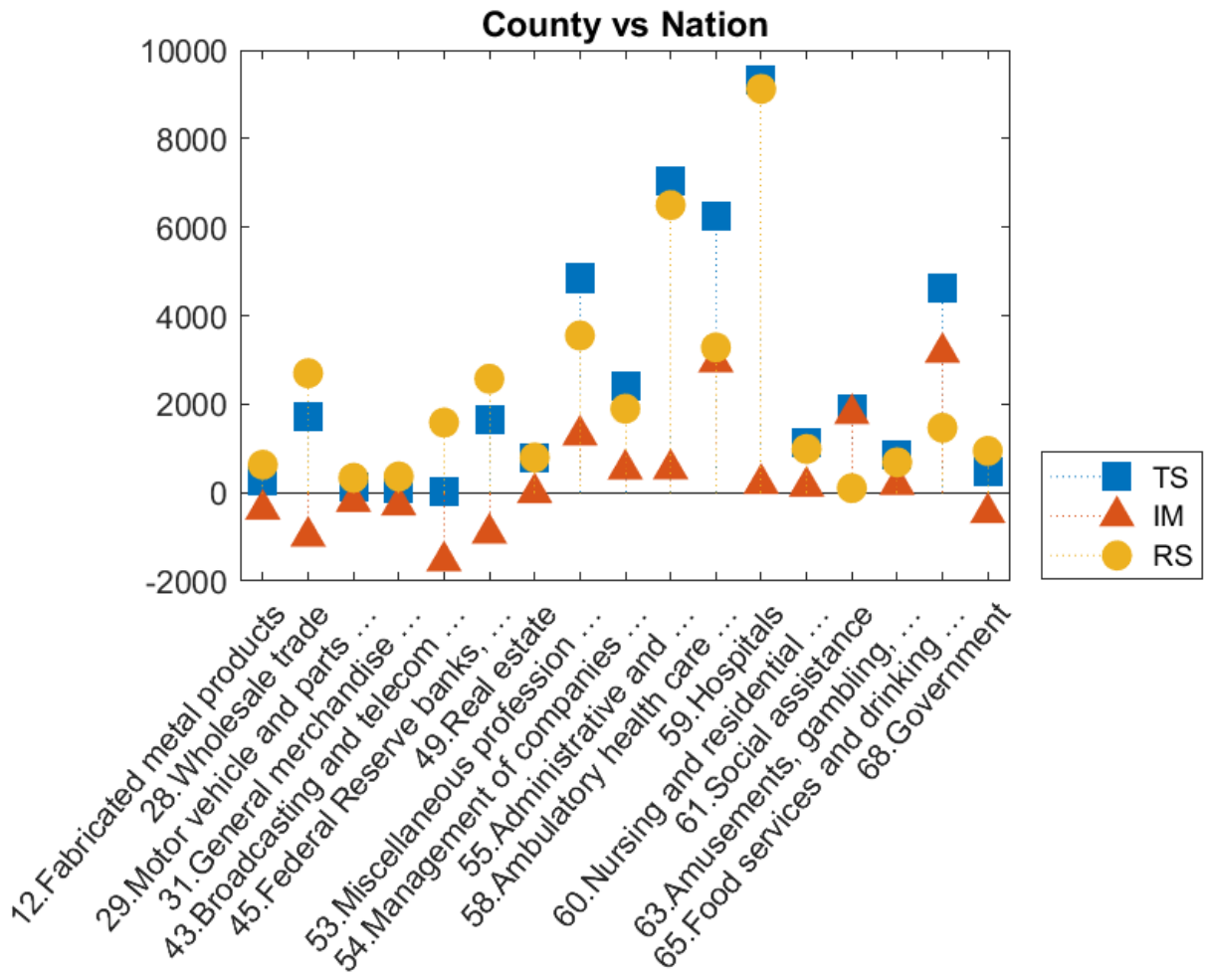
### Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.



Selected SSA Components for Greenville County, South Carolina vs the U.S.

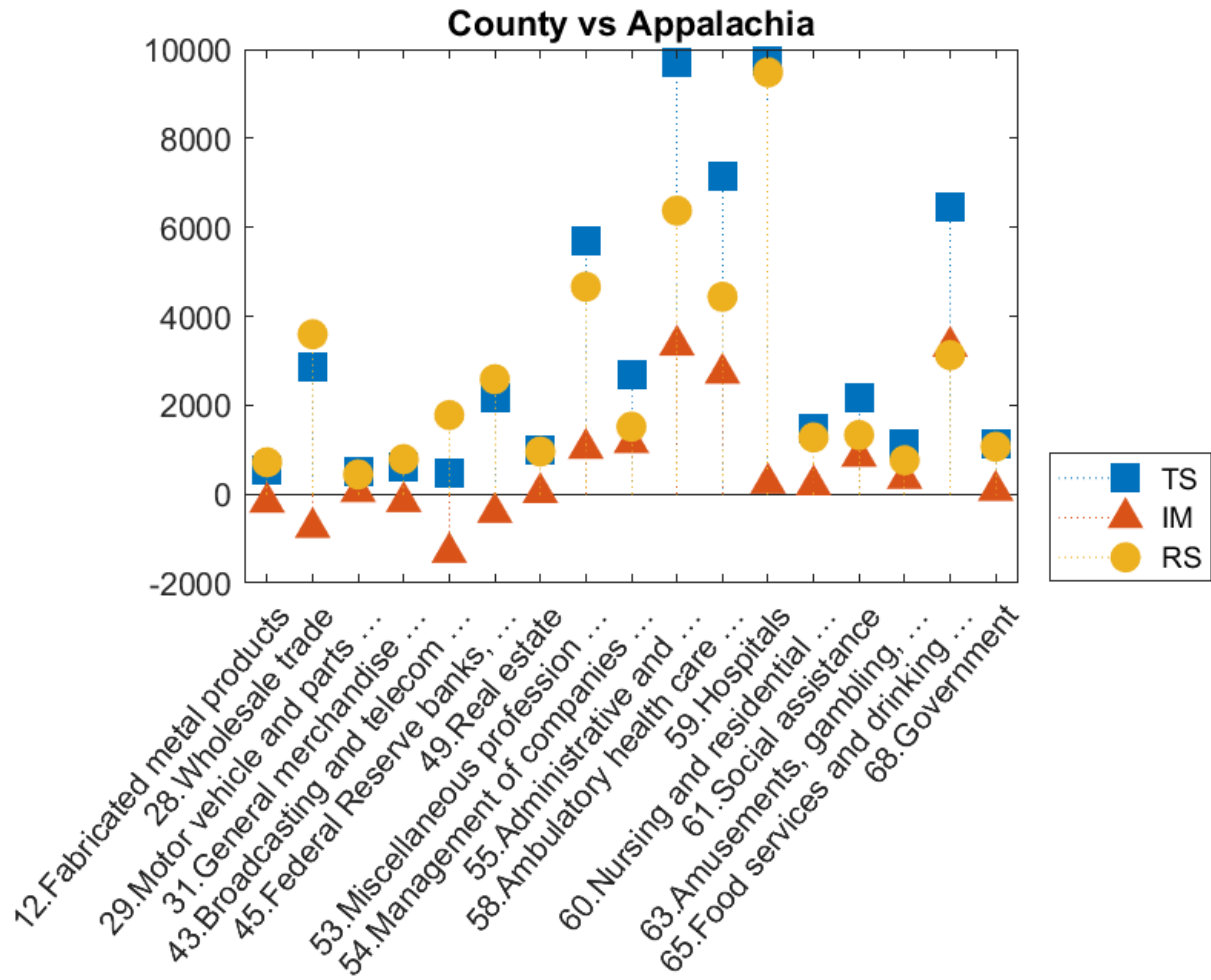


### Chapter 3. Greenville County, South Carolina

#### Greenville County, South Carolina vs U.S. for Selected Industries

| Industry | Name                           | NS    | TS    | IM     | RS    | Employment<br>2018 |
|----------|--------------------------------|-------|-------|--------|-------|--------------------|
| 12       | Fabricated metal products      | 290   | 251   | -379   | 630   | 3,110              |
| 28       | Wholesale trade                | 1,167 | 1,710 | -988   | 2,698 | 13,227             |
| 29       | Motor vehicle and parts ...    | 373   | 131   | -204   | 335   | 3,814              |
| 31       | General merchandise ...        | 554   | 80    | -285   | 365   | 5,544              |
| 43       | Broadcasting and telecom ...   | 443   | 36    | -1,547 | 1,583 | 4,410              |
| 45       | Federal Reserve banks, ...     | 531   | 1,655 | -917   | 2,572 | 6,891              |
| 49       | Real estate                    | 206   | 789   | -5     | 794   | 2,827              |
| 53       | Miscellaneous profession ...   | 867   | 4,849 | 1,299  | 3,550 | 13,403             |
| 54       | Management of companies ...    | 254   | 2,424 | 528    | 1,896 | 4,929              |
| 55       | Administrative and ...         | 2,776 | 7,030 | 533    | 6,497 | 34,421             |
| 58       | Ambulatory health care ...     | 948   | 6,232 | 2,950  | 3,282 | 15,591             |
| 59       | Hospitals                      | 413   | 9,326 | 203    | 9,123 | 13,403             |
| 60       | Nursing and residential ...    | 362   | 1,129 | 142    | 987   | 4,704              |
| 61       | Social assistance              | 307   | 1,882 | 1,781  | 101   | 4,907              |
| 63       | Amusements, gambling, ...      | 257   | 863   | 179    | 684   | 3,402              |
| 65       | Food services and drinking ... | 1,872 | 4,629 | 3,165  | 1,464 | 23,102             |
| 68       | Government                     | 679   | 486   | -457   | 943   | 7,190              |

Selected SSA Components for Greenville County, South Carolina vs the Appalachian Region

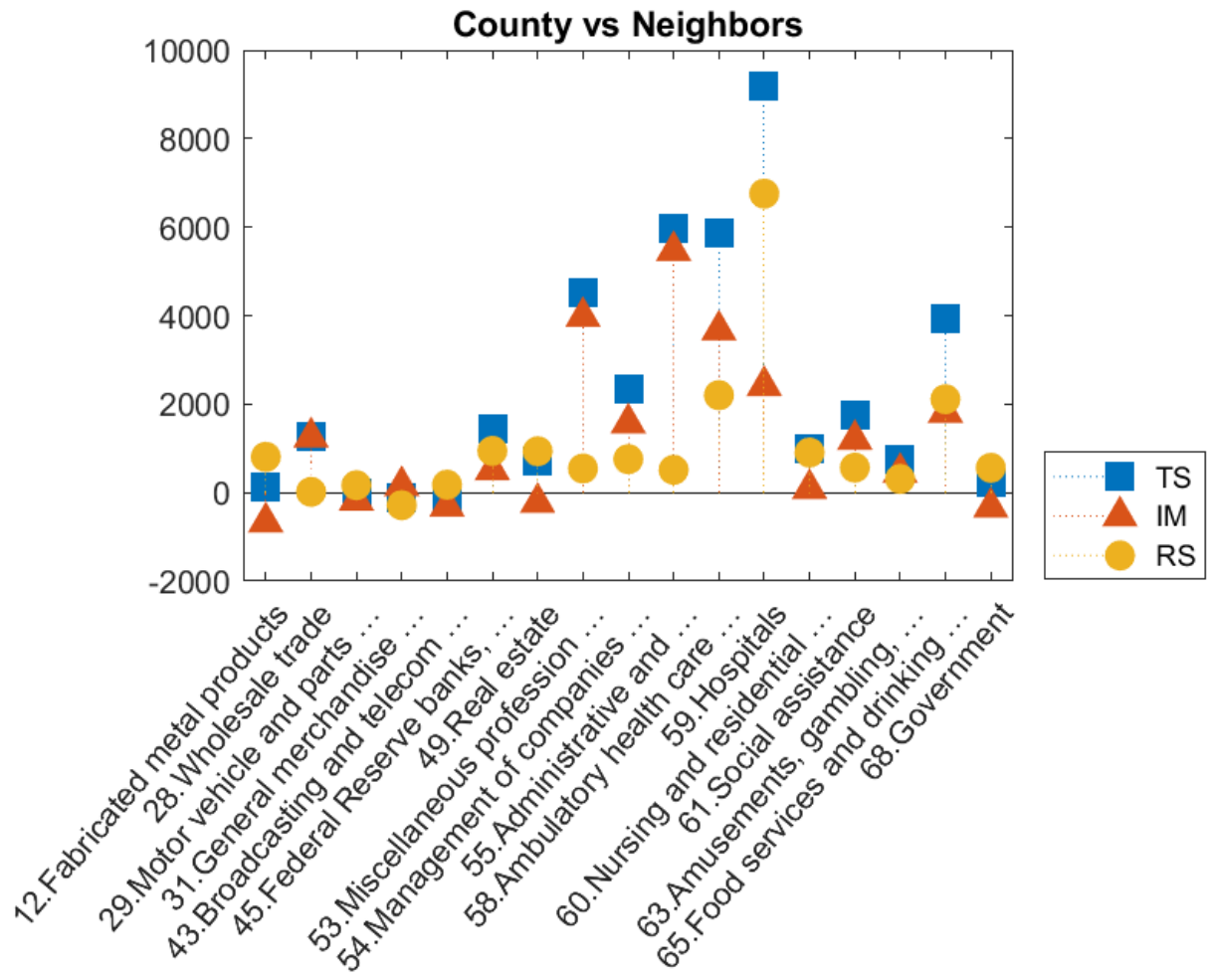


### Chapter 3. Greenville County, South Carolina

#### Selected SSA Components for Greenville County, South Carolina vs the Appalachian Region

| Industry | Name                           | NS | TS    | IM     | RS    | Employment<br>2018 |
|----------|--------------------------------|----|-------|--------|-------|--------------------|
| 12       | Fabricated metal products      | 9  | 533   | -183   | 716   | 3,110              |
| 28       | Wholesale trade                | 35 | 2,842 | -752   | 3,594 | 13,227             |
| 29       | Motor vehicle and parts ...    | 11 | 494   | 52     | 442   | 3,814              |
| 31       | General merchandise ...        | 17 | 618   | -169   | 787   | 5,544              |
| 43       | Broadcasting and telecom ...   | 13 | 466   | -1,312 | 1,778 | 4,410              |
| 45       | Federal Reserve banks, ...     | 16 | 2,170 | -414   | 2,584 | 6,891              |
| 49       | Real estate                    | 6  | 989   | 32     | 957   | 2,827              |
| 53       | Miscellaneous profession ...   | 26 | 5,690 | 1,027  | 4,663 | 13,403             |
| 54       | Management of companies ...    | 8  | 2,671 | 1,155  | 1,516 | 4,929              |
| 55       | Administrative and ...         | 84 | 9,722 | 3,349  | 6,373 | 34,421             |
| 58       | Ambulatory health care ...     | 29 | 7,152 | 2,715  | 4,437 | 15,591             |
| 59       | Hospitals                      | 12 | 9,727 | 245    | 9,482 | 13,403             |
| 60       | Nursing and residential ...    | 11 | 1,480 | 205    | 1,275 | 4,704              |
| 61       | Social assistance              | 9  | 2,179 | 850    | 1,329 | 4,907              |
| 63       | Amusements, gambling, ...      | 8  | 1,113 | 351    | 762   | 3,402              |
| 65       | Food services and drinking ... | 56 | 6,444 | 3,319  | 3,125 | 23,102             |
| 68       | Government                     | 20 | 1,145 | 80     | 1,065 | 7,190              |

Selected SSA Components for Greenville County, South Carolina vs Neighbors



### Chapter 3. Greenville County, South Carolina

#### Selected SSA Components for Greenville County, South Carolina vs Neighbors for Selected Industries

| Industry | Name                           | NS    | TS    | IM    | RS    | Employment<br>2018 |
|----------|--------------------------------|-------|-------|-------|-------|--------------------|
| 12       | Fabricated metal products      | 399   | 142   | -666  | 808   | 3,110              |
| 28       | Wholesale trade                | 1,608 | 1,269 | 1,253 | 16    | 13,227             |
| 29       | Motor vehicle and parts ...    | 514   | -9    | -176  | 167   | 3,814              |
| 31       | General merchandise ...        | 763   | -129  | 155   | -284  | 5,544              |
| 43       | Broadcasting and telecom ...   | 611   | -131  | -310  | 179   | 4,410              |
| 45       | Federal Reserve banks, ...     | 731   | 1,455 | 511   | 944   | 6,891              |
| 49       | Real estate                    | 285   | 711   | -224  | 935   | 2,827              |
| 53       | Miscellaneous profession ...   | 1,194 | 4,522 | 3,977 | 545   | 13,403             |
| 54       | Management of companies ...    | 350   | 2,328 | 1,572 | 756   | 4,929              |
| 55       | Administrative and ...         | 3,825 | 5,982 | 5,467 | 515   | 34,421             |
| 58       | Ambulatory health care ...     | 1,307 | 5,873 | 3,672 | 2,201 | 15,591             |
| 59       | Hospitals                      | 569   | 9,171 | 2,416 | 6,755 | 13,403             |
| 60       | Nursing and residential ...    | 499   | 993   | 87    | 906   | 4,704              |
| 61       | Social assistance              | 422   | 1,766 | 1,201 | 565   | 4,907              |
| 63       | Amusements, gambling, ...      | 355   | 765   | 455   | 310   | 3,402              |
| 65       | Food services and drinking ... | 2,579 | 3,922 | 1,811 | 2,111 | 23,102             |
| 68       | Government                     | 936   | 229   | -331  | 560   | 7,190              |

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## Chapter 4. Oconee County, South Carolina

Employment in Oconee County, South Carolina, grew from 23,390 in 2005 to 24,212 in 2018, for a change of 822, or 3.51%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

### Summary Results for Oconee County, South Carolina

| <b>County<br/>Summary</b> | <b>NS</b> | <b>TS</b> | <b>IM</b> | <b>RS</b> |
|---------------------------|-----------|-----------|-----------|-----------|
| vs. U.S.                  | 2,638     | -1,820    | -1,755    | -65       |
| vs.<br>Appalachia         | 71        | 740       | -782      | 1,522     |
| vs. Neighbors             | 342       | 482       | -731      | 1,213     |

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III – and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Oconee County, South Carolina, in comparison to at least one of the three referent regions.

## Chapter 4. Oconee County, South Carolina

### Industry Group Membership for Oconee County, South Carolina

| Industry | Name                           | Group Membership | Type A or B or C | Type I or II or III | Type a or b or c | Type i or ii or iii |
|----------|--------------------------------|------------------|------------------|---------------------|------------------|---------------------|
| 12       | Fabricated metal products      | F III c i        | no               | yes                 | yes              | yes                 |
| 14       | Computer and electronic ...    | F III c i        | no               | yes                 | yes              | yes                 |
| 16       | Motor vehicles, bodies ...     | C III a iii      | yes              | yes                 | yes              | yes                 |
| 17       | Other transportation ...       | F III c iii      | no               | yes                 | yes              | yes                 |
| 26       | Chemical products              | F III c i        | no               | yes                 | yes              | yes                 |
| 30       | Food and beverage stores       | F III c i        | no               | yes                 | yes              | yes                 |
| 32       | Other retail                   | F III c iii      | no               | yes                 | yes              | yes                 |
| 45       | Federal Reserve banks, ...     | F III c iii      | no               | yes                 | yes              | yes                 |
| 55       | Administrative and ...         | A I a iii        | yes              | yes                 | yes              | yes                 |
| 57       | Educational services           | F III a i        | no               | yes                 | yes              | yes                 |
| 58       | Ambulatory health care ...     | B I a i          | yes              | yes                 | yes              | yes                 |
| 60       | Nursing and residential ...    | E I a iii        | no               | yes                 | yes              | yes                 |
| 61       | Social assistance              | B I a i          | yes              | yes                 | yes              | yes                 |
| 63       | Amusements, gambling, ...      | B I a i          | yes              | yes                 | yes              | yes                 |
| 65       | Food services and drinking ... | B V b ii         | yes              | no                  | yes              | yes                 |
| 66       | Other services, exc. gov ...   | F III c i        | no               | yes                 | yes              | yes                 |
| 68       | Government                     | F III a i        | no               | yes                 | yes              | yes                 |

Notes:

Groups A, B, and C are from Appalachia vs. the United States



## **Chapter 4. Oconee County, South Carolina**

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Groups I, II, and III are from Oconee County, South Carolina vs. the United States

Groups a, b, and c are from Oconee County, South Carolina vs. Appalachia

Groups i, ii, and iii are from Oconee County, South Carolina vs. its neighbors

### Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Oconee County, South Carolina, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Oconee County, South Carolina, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Oconee County, South Carolina, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Oconee County, South Carolina, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

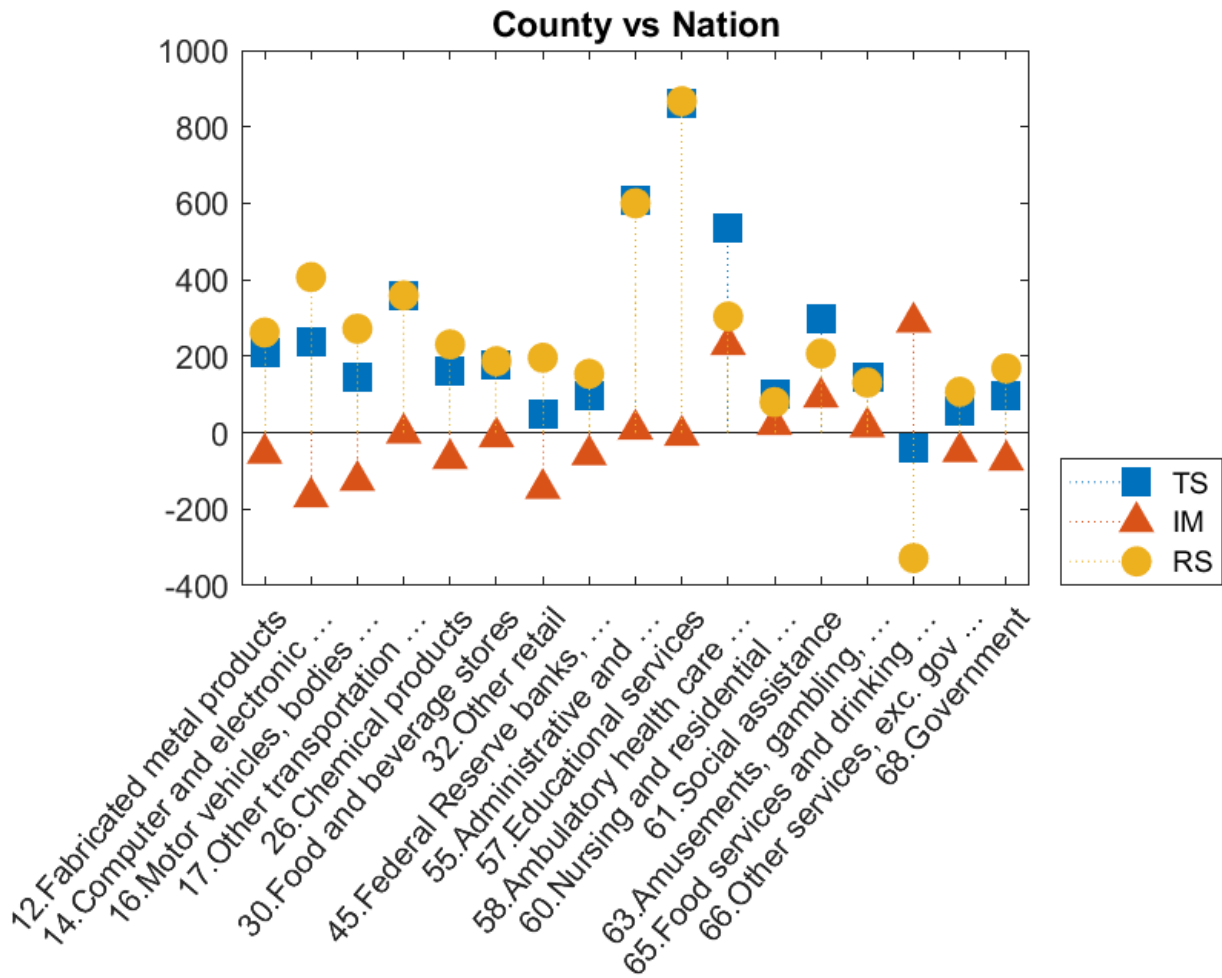
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Oconee County, South Carolina, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

### Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Oconee County, South Carolina vs the U.S.

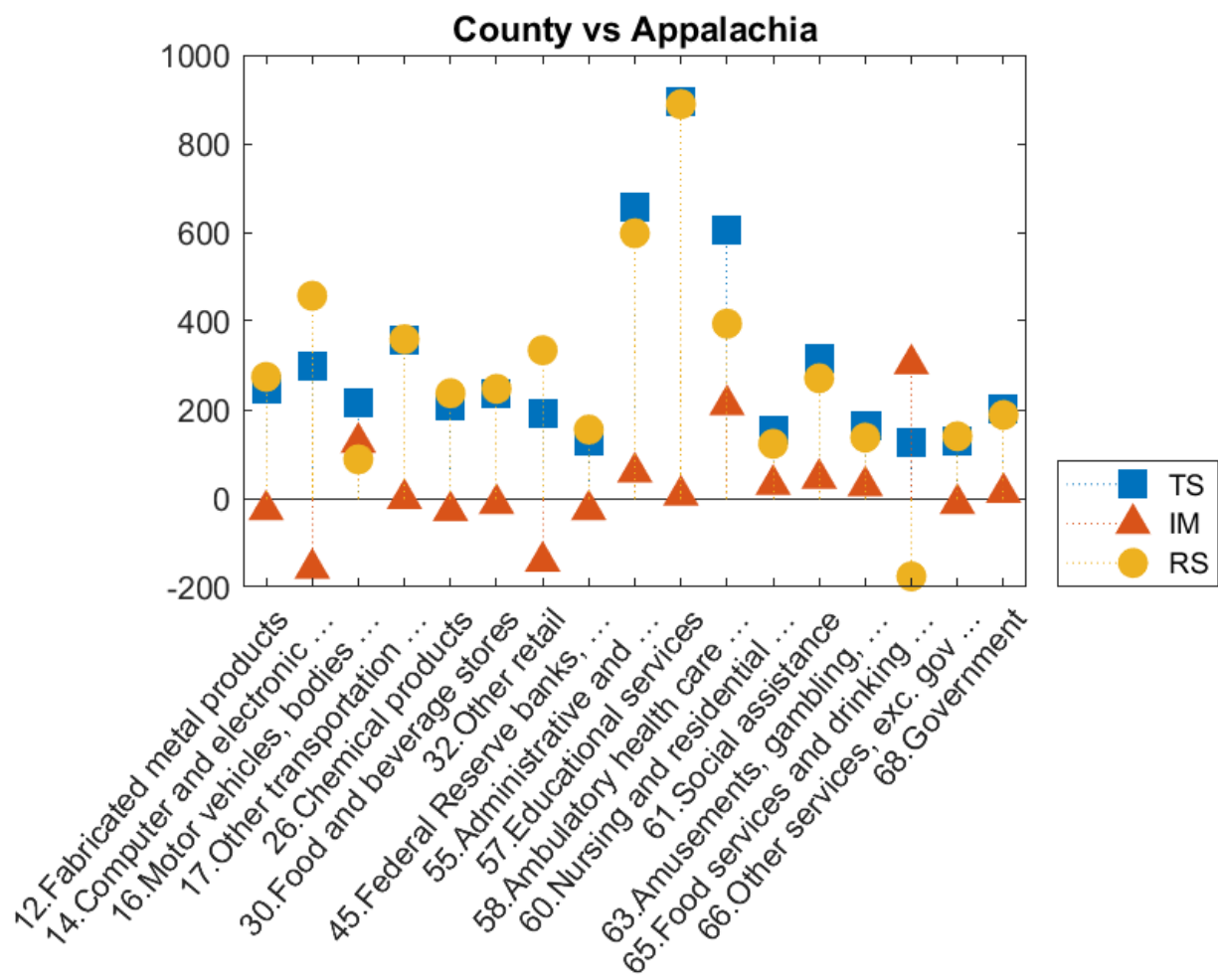


## Chapter 4. Oconee County, South Carolina

### Oconee County, South Carolina vs U.S. for Selected Industries

| Industry | Name                           | NS  | TS  | IM   | RS   | Employment<br>2018 |
|----------|--------------------------------|-----|-----|------|------|--------------------|
| 12       | Fabricated metal products      | 41  | 208 | -54  | 262  | 612                |
| 14       | Computer and electronic ...    | 63  | 239 | -168 | 407  | 863                |
| 16       | Motor vehicles, bodies ...     | 70  | 147 | -125 | 272  | 838                |
| 17       | Other transportation ...       | 1   | 358 | -1   | 359  | 366                |
| 26       | Chemical products              | 47  | 163 | -68  | 231  | 631                |
| 30       | Food and beverage stores       | 61  | 176 | -11  | 187  | 782                |
| 32       | Other retail                   | 147 | 50  | -146 | 196  | 1,500              |
| 45       | Federal Reserve banks, ...     | 33  | 96  | -58  | 154  | 426                |
| 55       | Administrative and ...         | 49  | 609 | 9    | 600  | 1,088              |
| 57       | Educational services           | 38  | 860 | -7   | 867  | 1,236              |
| 58       | Ambulatory health care ...     | 74  | 534 | 230  | 304  | 1,263              |
| 60       | Nursing and residential ...    | 55  | 101 | 21   | 80   | 641                |
| 61       | Social assistance              | 16  | 300 | 93   | 207  | 458                |
| 63       | Amusements, gambling, ...      | 21  | 146 | 15   | 131  | 351                |
| 65       | Food services and drinking ... | 171 | -39 | 289  | -328 | 1,648              |
| 66       | Other services, exc. gov ...   | 74  | 57  | -50  | 107  | 782                |
| 68       | Government                     | 107 | 96  | -72  | 168  | 1,156              |

### Selected SSA Components for Oconee County, South Carolina vs the Appalachian Region

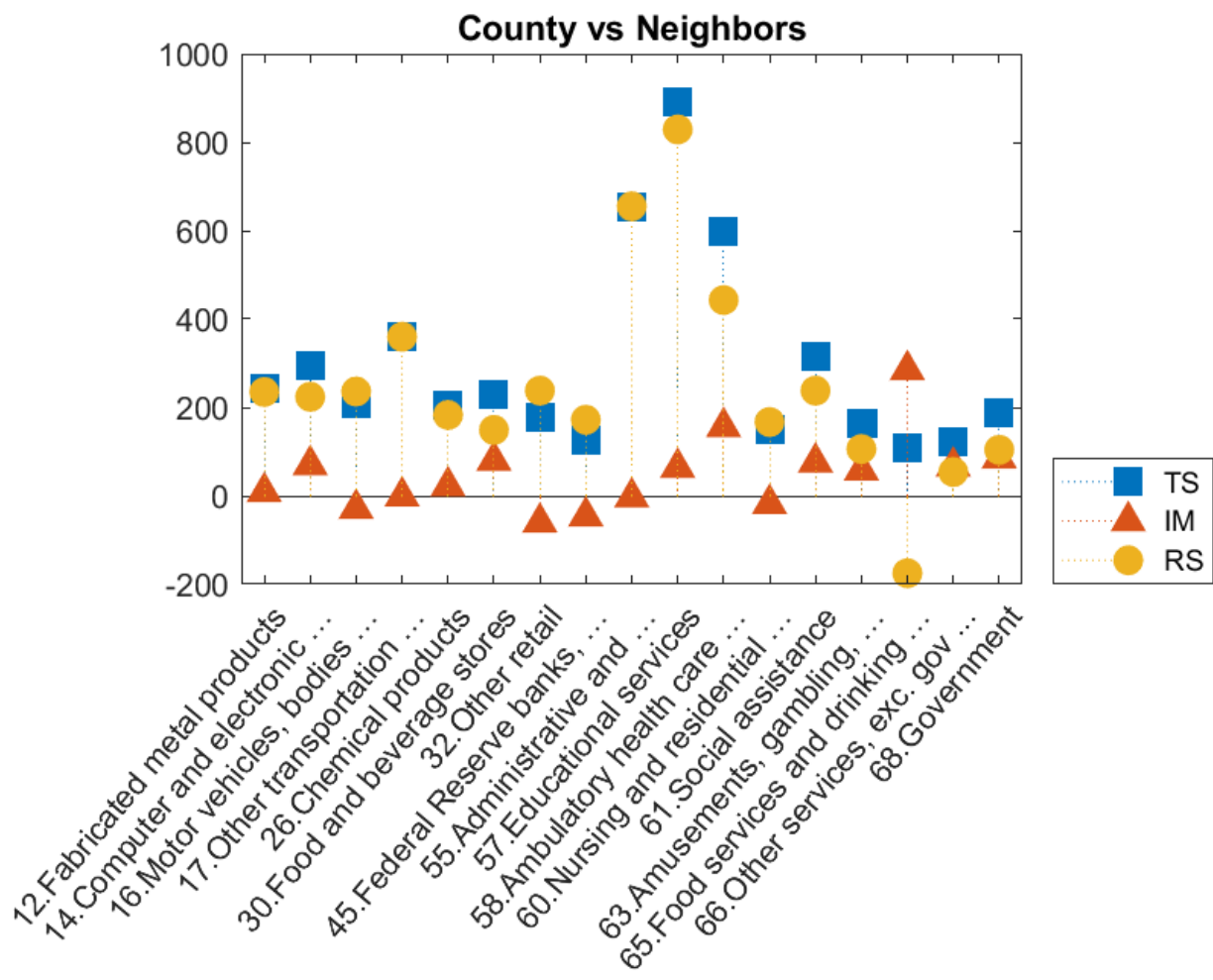


## Chapter 4. Oconee County, South Carolina

### Selected SSA Components for Oconee County, South Carolina vs the Appalachian Region

| Industry | Name                           | NS | TS  | IM   | RS   | Employment<br>2018 |
|----------|--------------------------------|----|-----|------|------|--------------------|
| 12       | Fabricated metal products      | 1  | 248 | -26  | 274  | 612                |
| 14       | Computer and electronic ...    | 2  | 299 | -158 | 457  | 863                |
| 16       | Motor vehicles, bodies ...     | 2  | 214 | 126  | 88   | 838                |
| 17       | Other transportation ...       | 0  | 358 | -1   | 359  | 366                |
| 26       | Chemical products              | 1  | 209 | -28  | 237  | 631                |
| 30       | Food and beverage stores       | 2  | 235 | -12  | 247  | 782                |
| 32       | Other retail                   | 4  | 192 | -142 | 334  | 1,500              |
| 45       | Federal Reserve banks, ...     | 1  | 129 | -26  | 155  | 426                |
| 55       | Administrative and ...         | 1  | 657 | 59   | 598  | 1,088              |
| 57       | Educational services           | 1  | 896 | 7    | 889  | 1,236              |
| 58       | Ambulatory health care ...     | 2  | 605 | 211  | 394  | 1,263              |
| 60       | Nursing and residential ...    | 2  | 154 | 31   | 123  | 641                |
| 61       | Social assistance              | 0  | 316 | 45   | 271  | 458                |
| 63       | Amusements, gambling, ...      | 1  | 165 | 28   | 137  | 351                |
| 65       | Food services and drinking ... | 5  | 127 | 303  | -176 | 1,648              |
| 66       | Other services, exc. gov ...   | 2  | 128 | -12  | 140  | 782                |
| 68       | Government                     | 3  | 201 | 13   | 188  | 1,156              |

## Selected SSA Components for Oconee County, South Carolina vs Neighbors



## Chapter 4. Oconee County, South Carolina

### Selected SSA Components for Oconee County, South Carolina vs Neighbors for Selected Industries

| Industry | Name                           | NS | TS  | IM  | RS   | Employment<br>2018 |
|----------|--------------------------------|----|-----|-----|------|--------------------|
| 12       | Fabricated metal products      | 5  | 244 | 9   | 235  | 612                |
| 14       | Computer and electronic ...    | 8  | 294 | 70  | 224  | 863                |
| 16       | Motor vehicles, bodies ...     | 9  | 207 | -29 | 236  | 838                |
| 17       | Other transportation ...       | 0  | 359 | -1  | 360  | 366                |
| 26       | Chemical products              | 6  | 205 | 22  | 183  | 631                |
| 30       | Food and beverage stores       | 8  | 229 | 80  | 149  | 782                |
| 32       | Other retail                   | 19 | 178 | -60 | 238  | 1,500              |
| 45       | Federal Reserve banks, ...     | 4  | 126 | -46 | 172  | 426                |
| 55       | Administrative and ...         | 6  | 652 | -3  | 655  | 1,088              |
| 57       | Educational services           | 5  | 893 | 64  | 829  | 1,236              |
| 58       | Ambulatory health care ...     | 10 | 599 | 156 | 443  | 1,263              |
| 60       | Nursing and residential ...    | 7  | 149 | -18 | 167  | 641                |
| 61       | Social assistance              | 2  | 314 | 76  | 238  | 458                |
| 63       | Amusements, gambling, ...      | 3  | 164 | 58  | 106  | 351                |
| 65       | Food services and drinking ... | 22 | 110 | 285 | -175 | 1,648              |
| 66       | Other services, exc. gov ...   | 10 | 121 | 67  | 54   | 782                |
| 68       | Government                     | 14 | 189 | 85  | 104  | 1,156              |



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## Chapter 5. Pickens County, South Carolina

Employment in Pickens County, South Carolina, grew from 33,633 in 2005 to 34,077 in 2018, for a change of 444, or 1.32%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

### Summary Results for Pickens County, South Carolina

| <b>County<br/>Summary</b> | <b>NS</b> | <b>TS</b> | <b>IM</b> | <b>RS</b> |
|---------------------------|-----------|-----------|-----------|-----------|
| vs. U.S.                  | 3,794     | -3,348    | -1,382    | -1,966    |
| vs.<br>Appalachia         | 112       | 327       | 108       | 219       |
| vs. Neighbors             | 4,846     | -4,405    | -744      | -3,661    |

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Pickens County, South Carolina, in comparison to at least one of the three referent regions.

## Chapter 5. Pickens County, South Carolina

### Industry Group Membership for Pickens County, South Carolina

| Industry | Name                           | Group Membership | Type A or B or C | Type I or II or III | Type a or b or c | Type i or ii or iii |
|----------|--------------------------------|------------------|------------------|---------------------|------------------|---------------------|
| 13       | Machinery                      | F III c iii      | no               | yes                 | yes              | yes                 |
| 14       | Computer and electronic ...    | F III c ii       | no               | yes                 | yes              | yes                 |
| 28       | Wholesale trade                | F III c i        | no               | yes                 | yes              | yes                 |
| 31       | General merchandise ...        | F III c i        | no               | yes                 | yes              | yes                 |
| 53       | Miscellaneous profession ...   | B V b v          | yes              | no                  | yes              | no                  |
| 57       | Educational services           | F III a iii      | no               | yes                 | yes              | yes                 |
| 58       | Ambulatory health care ...     | B II b ii        | yes              | yes                 | yes              | yes                 |
| 59       | Hospitals                      | E I a ii         | no               | yes                 | yes              | yes                 |
| 60       | Nursing and residential ...    | E II a v         | no               | yes                 | yes              | no                  |
| 63       | Amusements, gambling, ...      | B I a i          | yes              | yes                 | yes              | yes                 |
| 64       | Accommodation                  | A I a i          | yes              | yes                 | yes              | yes                 |
| 65       | Food services and drinking ... | B II b ii        | yes              | yes                 | yes              | yes                 |
| 68       | Government                     | F III a v        | no               | yes                 | yes              | no                  |

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Pickens County, South Carolina vs. the United States

Groups a, b, and c are from Pickens County, South Carolina vs. Appalachia

Groups i, ii, and iii are from Pickens County, South Carolina vs. its neighbors

### Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Pickens County, South Carolina, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Pickens County, South Carolina, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Pickens County, South Carolina, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Pickens County, South Carolina, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

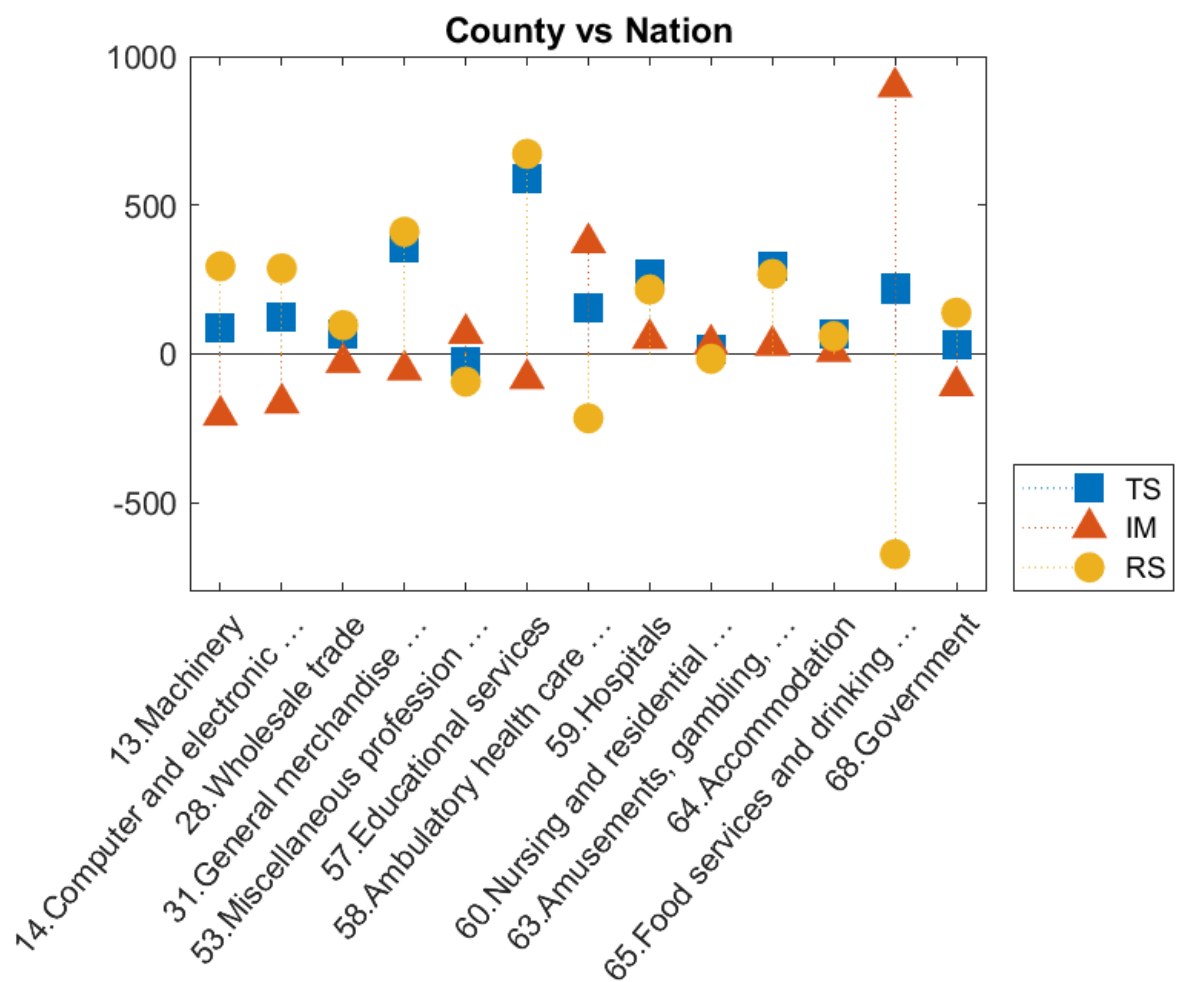
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Pickens County, South Carolina, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

### Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

## Selected SSA Components for Pickens County, South Carolina vs the U.S.

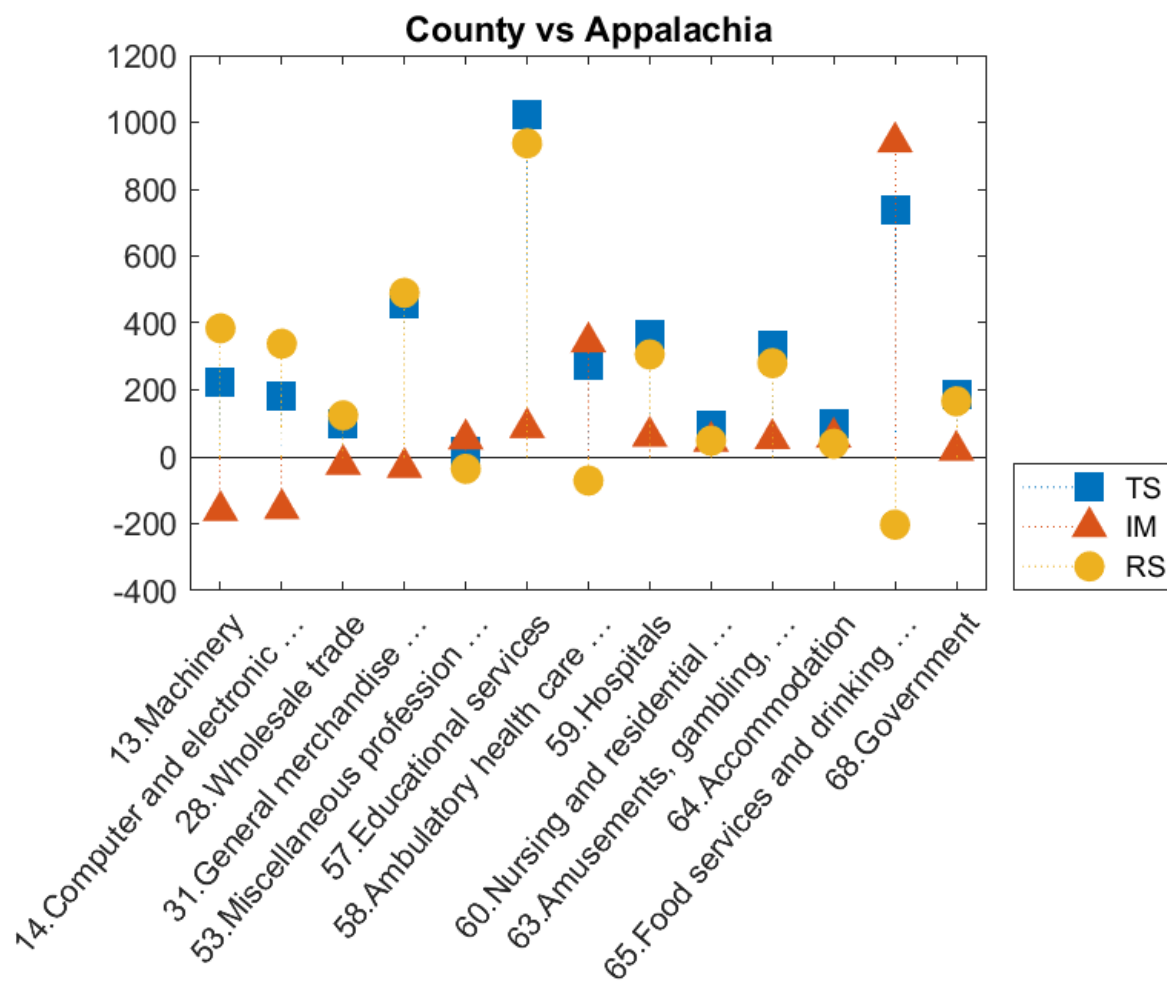


## Chapter 5. Pickens County, South Carolina

### Pickens County, South Carolina vs U.S. for Selected Industries

| Industry | Name                              | NS  | TS  | IM   | RS   | Employment<br>2018 |
|----------|-----------------------------------|-----|-----|------|------|--------------------|
| 13       | Machinery                         | 140 | 87  | -207 | 294  | 1,467              |
| 14       | Computer and<br>electronic ...    | 62  | 121 | -166 | 287  | 738                |
| 28       | Wholesale<br>trade                | 36  | 66  | -30  | 96   | 421                |
| 31       | General<br>merchandise ...        | 106 | 355 | -55  | 410  | 1,402              |
| 53       | Miscellaneous<br>profession ...   | 45  | -26 | 68   | -94  | 419                |
| 57       | Educational<br>services           | 450 | 588 | -84  | 672  | 5,028              |
| 58       | Ambulatory<br>health care ...     | 120 | 156 | 373  | -217 | 1,337              |
| 59       | Hospitals                         | 103 | 267 | 51   | 216  | 1,287              |
| 60       | Nursing and<br>residential ...    | 81  | 15  | 32   | -17  | 815                |
| 63       | Amusements,<br>gambling, ...      | 40  | 296 | 28   | 268  | 689                |
| 64       | Accommodation                     | 32  | 66  | 7    | 59   | 384                |
| 65       | Food services<br>and drinking ... | 531 | 223 | 897  | -674 | 5,461              |
| 68       | Government                        | 160 | 30  | -108 | 138  | 1,612              |

## Selected SSA Components for Pickens County, South Carolina vs the Appalachian Region

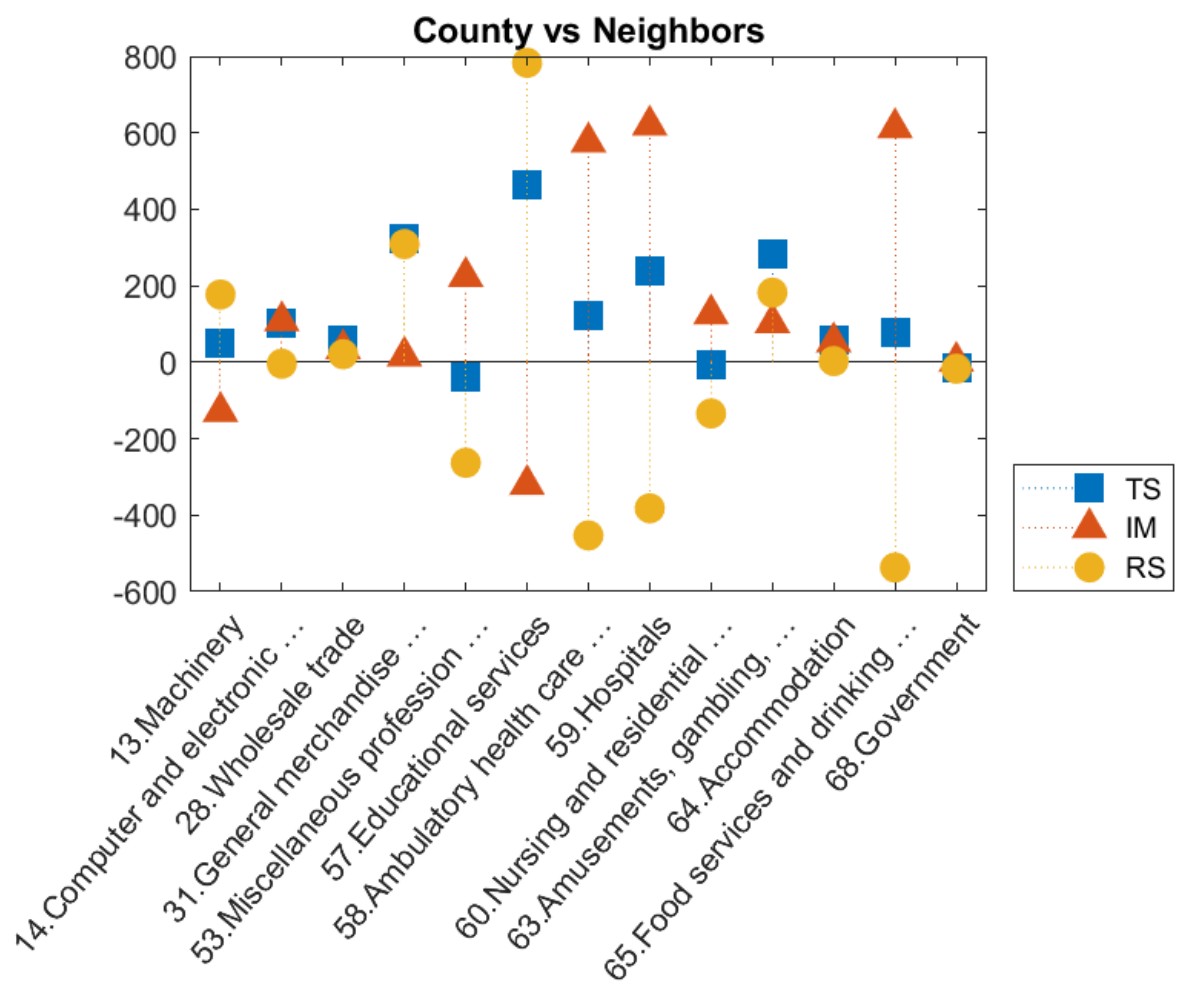


## Chapter 5. Pickens County, South Carolina

### Selected SSA Components for Pickens County, South Carolina vs the Appalachian Region

| Industry | Name                              | NS | TS    | IM   | RS   | Employment<br>2018 |
|----------|-----------------------------------|----|-------|------|------|--------------------|
| 13       | Machinery                         | 4  | 223   | -161 | 384  | 1,467              |
| 14       | Computer and<br>electronic ...    | 2  | 183   | -155 | 338  | 738                |
| 28       | Wholesale<br>trade                | 1  | 101   | -23  | 124  | 421                |
| 31       | General<br>merchandise ...        | 3  | 458   | -32  | 490  | 1,402              |
| 53       | Miscellaneous<br>profession ...   | 1  | 17    | 53   | -36  | 419                |
| 57       | Educational<br>services           | 14 | 1,024 | 87   | 937  | 5,028              |
| 58       | Ambulatory<br>health care ...     | 4  | 272   | 343  | -71  | 1,337              |
| 59       | Hospitals                         | 3  | 367   | 61   | 306  | 1,287              |
| 60       | Nursing and<br>residential ...    | 2  | 94    | 46   | 48   | 815                |
| 63       | Amusements,<br>gambling, ...      | 1  | 334   | 54   | 280  | 689                |
| 64       | Accommodation                     | 1  | 97    | 58   | 39   | 384                |
| 65       | Food services<br>and drinking ... | 16 | 738   | 941  | -203 | 5,461              |
| 68       | Government                        | 5  | 185   | 19   | 166  | 1,612              |

## Selected SSA Components for Pickens County, South Carolina vs Neighbors





## Chapter 5. Pickens County, South Carolina

### Selected SSA Components for Pickens County, South Carolina vs Neighbors for Selected Industries

| Industry | Name                              | NS  | TS  | IM   | RS   | Employment<br>2018 |
|----------|-----------------------------------|-----|-----|------|------|--------------------|
| 13       | Machinery                         | 179 | 48  | -129 | 177  | 1,467              |
| 14       | Computer and<br>electronic ...    | 80  | 104 | 108  | -4   | 738                |
| 28       | Wholesale<br>trade                | 46  | 56  | 35   | 21   | 421                |
| 31       | General<br>merchandise ...        | 136 | 325 | 16   | 309  | 1,402              |
| 53       | Miscellaneous<br>profession ...   | 58  | -39 | 224  | -263 | 419                |
| 57       | Educational<br>services           | 575 | 463 | -320 | 783  | 5,028              |
| 58       | Ambulatory<br>health care ...     | 153 | 123 | 576  | -453 | 1,337              |
| 59       | Hospitals                         | 132 | 238 | 620  | -382 | 1,287              |
| 60       | Nursing and<br>residential ...    | 104 | -8  | 126  | -134 | 815                |
| 63       | Amusements,<br>gambling, ...      | 51  | 285 | 103  | 182  | 689                |
| 64       | Accommodation                     | 41  | 56  | 53   | 3    | 384                |
| 65       | Food services<br>and drinking ... | 678 | 76  | 613  | -537 | 5,461              |
| 68       | Government                        | 205 | -15 | 2    | -17  | 1,612              |

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## Chapter 6. Spartanburg County, South Carolina

Employment in Spartanburg County, South Carolina, grew from 116,666 in 2005 to 142,004 in 2018, for a change of 25,338, or 21.72%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

### Summary Results for Spartanburg County, South Carolina

| County<br>Summary | NS     | TS     | IM     | RS     |
|-------------------|--------|--------|--------|--------|
| vs. U.S.          | 13,157 | 12,185 | -5,426 | 17,611 |
| vs.<br>Appalachia | 398    | 24,942 | -844   | 25,786 |
| vs. Neighbors     | 19,439 | 5,891  | 1,022  | 4,869  |

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Spartanburg County, South Carolina, in comparison to at least one of the three referent regions.

## Chapter 6. Spartanburg County, South Carolina

### Industry Group Membership for Spartanburg County, South Carolina

| Industry | Name                           | Group Membership | Type A or B or C | Type I or II or III | Type a or b or c | Type i or ii or iii |
|----------|--------------------------------|------------------|------------------|---------------------|------------------|---------------------|
| 16       | Motor vehicles, bodies ...     | C III a ii       | yes              | yes                 | yes              | yes                 |
| 26       | Chemical products              | F III c iii      | no               | yes                 | yes              | yes                 |
| 28       | Wholesale trade                | F III c ii       | no               | yes                 | yes              | yes                 |
| 30       | Food and beverage stores       | F III c iii      | no               | yes                 | yes              | yes                 |
| 31       | General merchandise ...        | F III c iii      | no               | yes                 | yes              | yes                 |
| 32       | Other retail                   | F III c iii      | no               | yes                 | yes              | yes                 |
| 36       | Truck transportation           | F III c iii      | no               | yes                 | yes              | yes                 |
| 39       | Other transportation ...       | E II c iv        | no               | yes                 | yes              | no                  |
| 45       | Federal Reserve banks, ...     | F III c i        | no               | yes                 | yes              | yes                 |
| 53       | Miscellaneous profession ...   | B I a ii         | yes              | yes                 | yes              | yes                 |
| 54       | Management of companies ...    | A I b ii         | yes              | yes                 | yes              | yes                 |
| 55       | Administrative and ...         | A I a i          | yes              | yes                 | yes              | yes                 |
| 57       | Educational services           | F III a iii      | no               | yes                 | yes              | yes                 |
| 58       | Ambulatory health care ...     | B I a ii         | yes              | yes                 | yes              | yes                 |
| 59       | Hospitals                      | E I a ii         | no               | yes                 | yes              | yes                 |
| 61       | Social assistance              | B I a i          | yes              | yes                 | yes              | yes                 |
| 65       | Food services and drinking ... | B II a ii        | yes              | yes                 | yes              | yes                 |

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Spartanburg County, South Carolina vs. the United States

## **Chapter 6. Spartanburg County, South Carolina**

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Groups a, b, and c are from Spartanburg County, South Carolina vs. Appalachia

Groups i, ii, and iii are from Spartanburg County, South Carolina vs. its neighbors

### Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Spartanburg County, South Carolina, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Spartanburg County, South Carolina, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Spartanburg County, South Carolina, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Spartanburg County, South Carolina, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

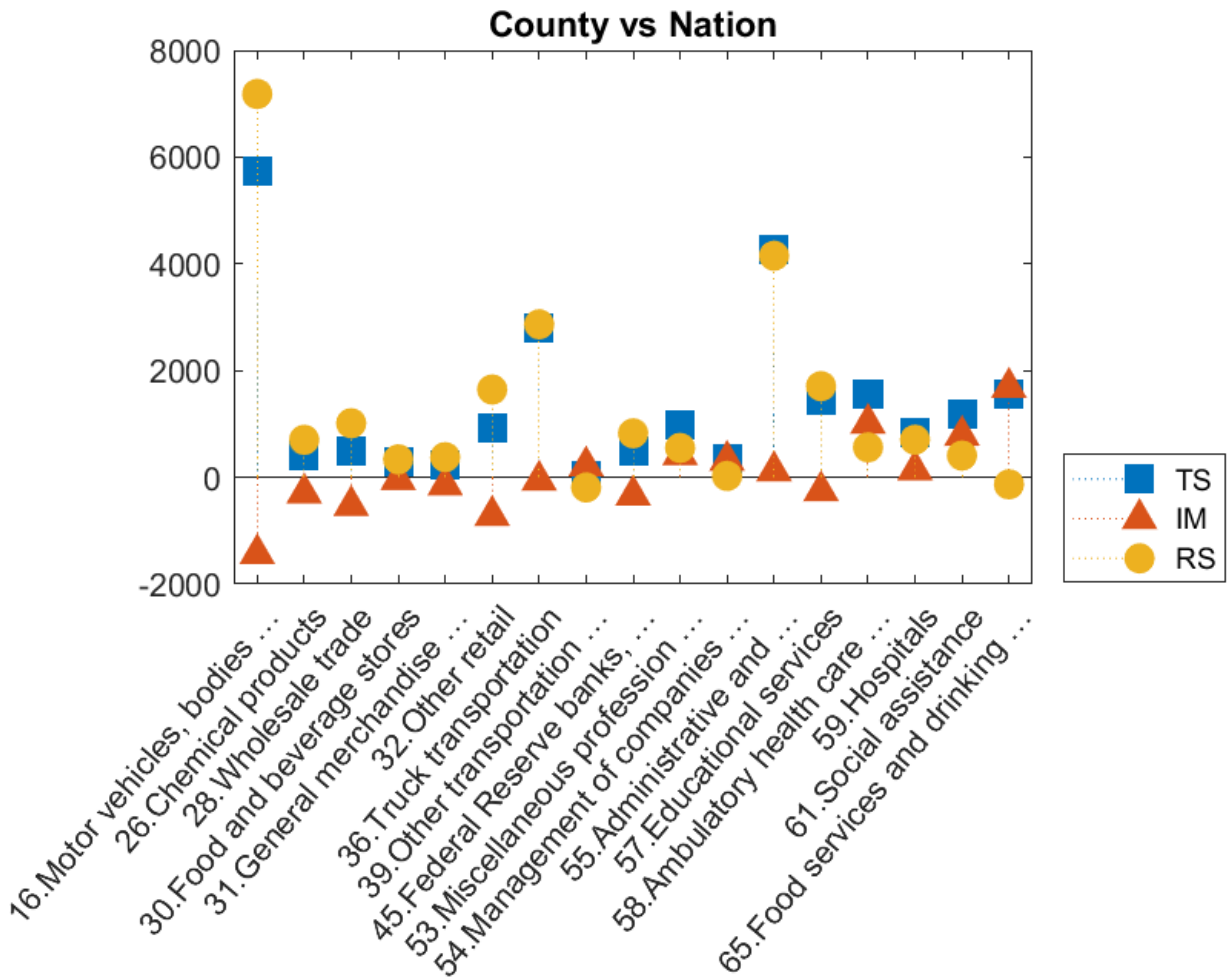
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Spartanburg County, South Carolina, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

### Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Spartanburg County, South Carolina vs the U.S.

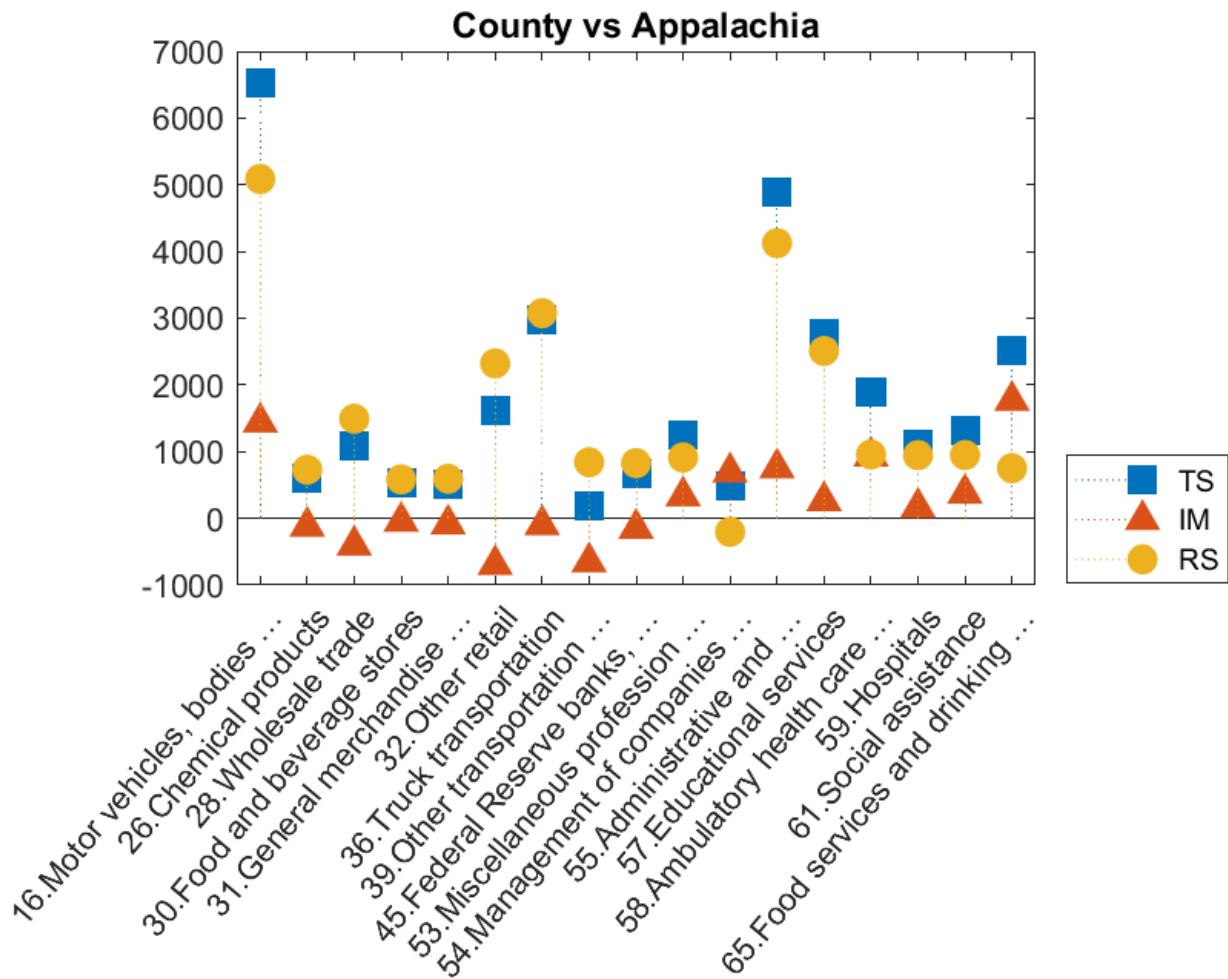


## Chapter 6. Spartanburg County, South Carolina

### Spartanburg County, South Carolina vs U.S. for Selected Industries

| Industry | Name                           | NS    | TS    | IM     | RS    | Employment<br>2018 |
|----------|--------------------------------|-------|-------|--------|-------|--------------------|
| 16       | Motor vehicles, bodies ...     | 799   | 5,751 | -1,432 | 7,183 | 13,637             |
| 26       | Chemical products              | 206   | 409   | -294   | 703   | 2,440              |
| 28       | Wholesale trade                | 625   | 484   | -529   | 1,013 | 6,649              |
| 30       | Food and beverage stores       | 253   | 292   | -45    | 337   | 2,789              |
| 31       | General merchandise            | 283   | 232   | -146   | 378   | 3,024              |
| 32       | Other retail                   | 720   | 930   | -716   | 1,646 | 8,037              |
| 36       | Truck transportation           | 170   | 2,812 | -56    | 2,868 | 4,489              |
| 39       | Other transportation           | 170   | 21    | 211    | -190  | 1,698              |
| 45       | Federal Reserve banks, ...     | 193   | 490   | -334   | 824   | 2,396              |
| 53       | Miscellaneous profession ...   | 282   | 973   | 422    | 551   | 3,753              |
| 54       | Management of companies        | 152   | 343   | 317    | 26    | 1,845              |
| 55       | Administrative and ...         | 626   | 4,272 | 120    | 4,152 | 10,448             |
| 57       | Educational services           | 1,359 | 1,454 | -254   | 1,708 | 14,863             |
| 58       | Ambulatory health care ...     | 325   | 1,573 | 1,011  | 562   | 4,778              |
| 59       | Hospitals                      | 278   | 842   | 137    | 705   | 3,585              |
| 61       | Social assistance              | 135   | 1,193 | 785    | 408   | 2,526              |
| 65       | Food services and drinking ... | 996   | 1,552 | 1,683  | -131  | 11,379             |

## Selected SSA Components for Spartanburg County, South Carolina vs the Appalachian Region



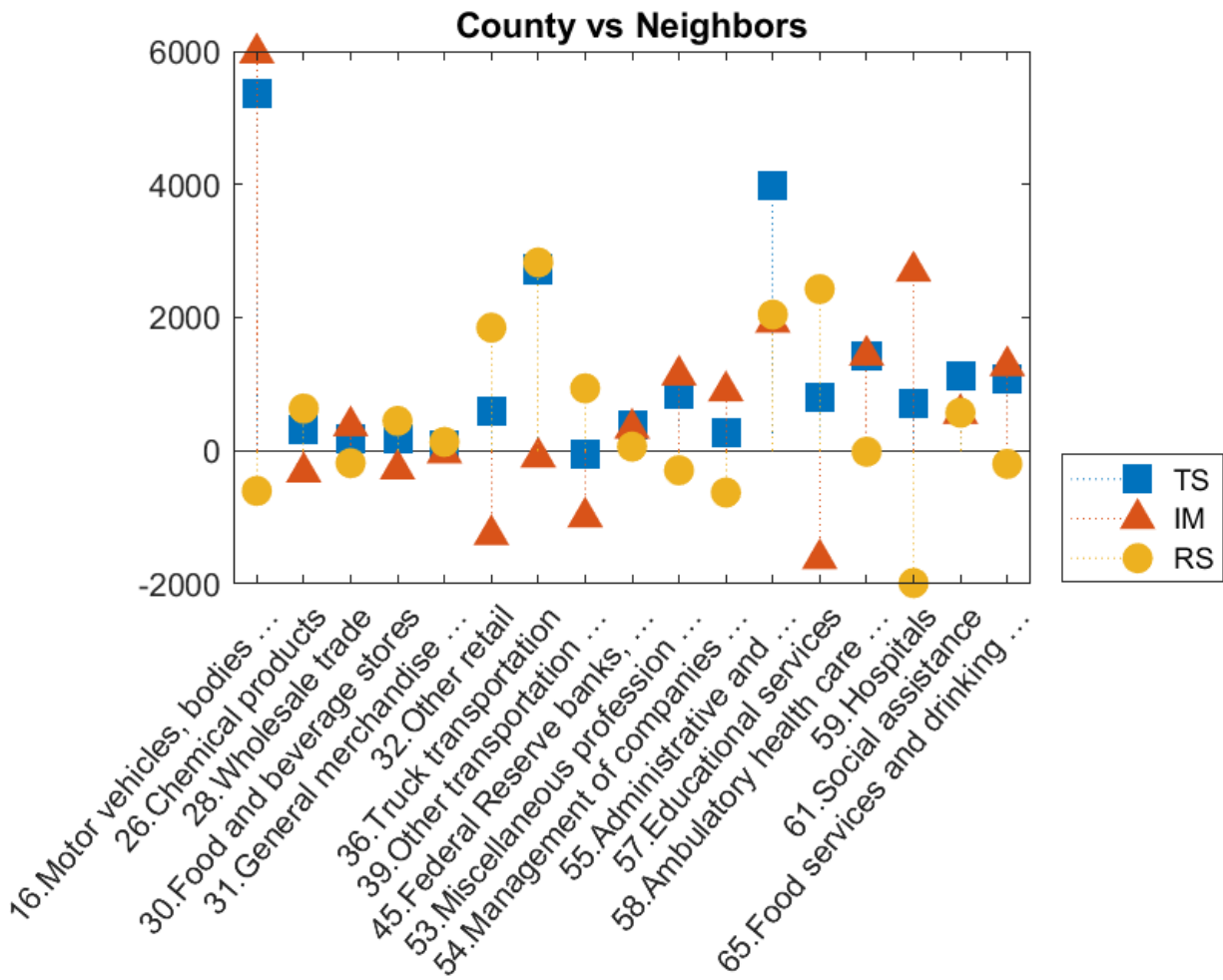


## Chapter 6. Spartanburg County, South Carolina

### Selected SSA Components for Spartanburg County, South Carolina vs the Appalachian Region

| Industry | Name                           | NS | TS    | IM    | RS    | Employment<br>2018 |
|----------|--------------------------------|----|-------|-------|-------|--------------------|
| 16       | Motor vehicles, bodies ...     | 24 | 6,527 | 1,441 | 5,086 | 13,637             |
| 26       | Chemical products              | 6  | 609   | -120  | 729   | 2,440              |
| 28       | Wholesale trade                | 19 | 1,090 | -403  | 1,493 | 6,649              |
| 30       | Food and beverage stores       | 8  | 538   | -47   | 585   | 2,789              |
| 31       | General merchandise ...        | 9  | 506   | -87   | 593   | 3,024              |
| 32       | Other retail                   | 22 | 1,628 | -695  | 2,323 | 8,037              |
| 36       | Truck transportation           | 5  | 2,977 | -98   | 3,075 | 4,489              |
| 39       | Other transportation ...       | 5  | 186   | -655  | 841   | 1,698              |
| 45       | Federal Reserve banks, ...     | 6  | 677   | -151  | 828   | 2,396              |
| 53       | Miscellaneous profession ...   | 8  | 1,247 | 334   | 913   | 3,753              |
| 54       | Management of companies ...    | 5  | 491   | 693   | -202  | 1,845              |
| 55       | Administrative and ...         | 19 | 4,879 | 755   | 4,124 | 10,448             |
| 57       | Educational services           | 41 | 2,772 | 263   | 2,509 | 14,863             |
| 58       | Ambulatory health care ...     | 10 | 1,888 | 930   | 958   | 4,778              |
| 59       | Hospitals                      | 8  | 1,112 | 165   | 947   | 3,585              |
| 61       | Social assistance              | 4  | 1,324 | 375   | 949   | 2,526              |
| 65       | Food services and drinking ... | 30 | 2,518 | 1,766 | 752   | 11,379             |

### Selected SSA Components for Spartanburg County, South Carolina vs Neighbors



## Chapter 6. Spartanburg County, South Carolina

### Selected SSA Components for Spartanburg County, South Carolina vs Neighbors for Selected Industries

| Industry | Name                           | NS    | TS    | IM     | RS     | Employment<br>2018 |
|----------|--------------------------------|-------|-------|--------|--------|--------------------|
| 16       | Motor vehicles, bodies ...     | 1,181 | 5,369 | 5,972  | -603   | 13,637             |
| 26       | Chemical products              | 304   | 311   | -322   | 633    | 2,440              |
| 28       | Wholesale trade                | 923   | 185   | 371    | -186   | 6,649              |
| 30       | Food and beverage stores       | 374   | 171   | -277   | 448    | 2,789              |
| 31       | General merchandise ...        | 418   | 97    | -35    | 132    | 3,024              |
| 32       | Other retail                   | 1,064 | 586   | -1,262 | 1,848  | 8,037              |
| 36       | Truck transportation           | 251   | 2,731 | -97    | 2,828  | 4,489              |
| 39       | Other transportation ...       | 251   | -60   | -997   | 937    | 1,698              |
| 45       | Federal Reserve banks, ...     | 285   | 397   | 335    | 62     | 2,396              |
| 53       | Miscellaneous profession ...   | 416   | 839   | 1,133  | -294   | 3,753              |
| 54       | Management of companies ...    | 225   | 270   | 898    | -628   | 1,845              |
| 55       | Administrative and ...         | 925   | 3,972 | 1,927  | 2,045  | 10,448             |
| 57       | Educational services           | 2,008 | 805   | -1,623 | 2,428  | 14,863             |
| 58       | Ambulatory health care ...     | 480   | 1,417 | 1,432  | -15    | 4,778              |
| 59       | Hospitals                      | 411   | 709   | 2,696  | -1,987 | 3,585              |
| 61       | Social assistance              | 200   | 1,128 | 557    | 571    | 2,526              |
| 65       | Food services and drinking ... | 1,472 | 1,077 | 1,275  | -198   | 11,379             |